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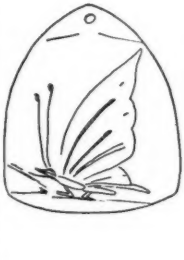

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ROCKS & MINERALS

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CHIPS FROM THE QUARRY

Coming Events

Feb. 28-March 2, 1958—Fourth annual Gem and Mineral Show of the Tucson Gem and Mineral Society, Pima County Fairgrounds, Tucson, Ariz. For particulars contact Mrs. Irene Barber, Publicity Chairman, Rt. 9, Box 907, Tucson, Ariz.

March 7, 8, 9, 1958—The 1958 Convention of the Rocky Mt. Federation of Mineral Societies will be held in Phoenix, Ariz., in conjunction with the Annual Gem & Mineral Festival. The Mineralogical Society of Arizona, the Maricopa Lapidary Society, and the AiResearch Lapidary Society are the hosts.

April 26, 27, 1958—Fifth Annual Spring Show, Wichita Gem & Mineral Society, Kansas National Guard Armory, 3535 W. Douglas, Wichita, Kans.

May 1-4, 1958—National Gem & Mineral Show of the Texas Federation of Mineral Societies and the American Federation of Mineralogical Societies. Dallas Gem & Mineral Society, will be host. Women's Bldg., State Fair Grounds, Dallas, Texas. For particulars contact Dwight Halstead, General Show Chairman, 4728 Westchester Mall, Dallas 19, Texas.

June 19, 20 and 21—Midwest Federation of Mineralogical and Geological Societies 1958 Convention and Show, Downers Grove Community High School, Downers Grove, Illinois. Earth Science Club of Northern Illinois, host. 4729 Prince Street, Downers Grove, Illinois.

Aug. 7, 8, 9, 1958—Eastern Federation of Mineralogical and Lapidary Societies Convention. City Auditorium, Asheville, N.C. For particulars contact Fred M. Allen, Jr., Box 501, Lincolnton, N.C.

Photo on the Cover

The photo on the front cover of this issue was sent in by Clifford J. Awald, 162 Southwood Dr., Kenmore 17, N.Y. It is a quartz crystal with three phantoms from Minas Gerais, Brazil. Photograph by Charles A. Simons, Curator of Photography, Buffalo Museum of Science, Buffalo, N.Y. Specimen is in the private collection of Mr. Awald.

AMERICAN FEDERATION OF MINERALOGICAL SOCIETIES

1958 JUNIOR ESSAY CONTEST

1—Any boy or girl, 16 years of age or under as of May 1st, 1958, is eligible to compete.

2—Each essay shall be entirely the work of the person entering same.

3—The subject of the essay shall be "WHY I SHOULD BE A MEMBER OF A MINERAL AND/OR GEM SOCIETY," and shall be of not more than 2000 words.

4—PRIZES will be awarded at the 1958 convention of the American Federation, at Dallas, Texas, May 1st through 4th and will be a $50.00 U.S. Savings bond for 1st place and a $25.00 bond for 2nd place.

5—Deadline for mailing entries will be midnight, March 31st, 1958.

6—All entries are to be addressed:
Henry B. Graves, Contest Chm.,
3153 N.W. 27th Street,
Miami 42, Florida.

7—All manuscripts submitted will become the property of the American Federation of Mineralogical Societies to be used in any manner they may see fit.

8—The decision of the judges shall be final.

Crater of Diamonds

Murfreesboro, Arkansas

By CAPTAIN GEORGE W. OWENS
Little Rock Air Force Base
Jacksonville, Ark.

It was a nice cool morning in May, the car engine hummed a steady tune as we drove down highway 67 from Little Rock toward Murfreesboro, some 115 miles away. In the car were miner's picks, entrenching tools from WWII, a gold pan, small scrapers, wire gauges, estwing hammer, and various other tools known to all who search for their own cutting materials.

Since this was the author's first "digging" visit to the area, it was desired to leave no stone unturned to assure the discovery of one of the fabulous diamonds for which the Crater of Diamonds is so famous. Accompanying the author was Technical Sergeant Albion Budney, on his first rock trip and excited as a boy with his first pair of long pants! Believe he had visions of diamonds, already facted, as big as watermelons. So in this atmosphere of happy expectancy we continued our trip over the Arkansas highway toward our fortune.

As we had departed Little Rock very early we were in Murfreesboro by eight o'clock, due to the very excellent signs at the outskirts and in the center of town there was never any doubt as to our proper direction toward the world-known diamond location. The property is situated a short distance (2½ miles) from the center of town and is at the end of the hard-surfaced road. A right turn from the road brought us onto the property. A short time later we were shaking hands with Mr. and Mrs. Millar, the proprietors of the "Crater of Diamonds." These friendly folk have established a fine rock shop and a small refreshment center at the entrance to the 78 acres of diamonds. The Millars are not actually "mining" the property in the true sense of the word but they are conducting some small

Mr. Millar, your jovial host at the Crater of Diamonds, looking at some of his fine handicraft in the Rock Shop.

operations that yield some diamonds. Both Mr. and Mrs. Millar know their rocks as well as their diamonds and Mrs. Millar turns out some very beautiful silver work in addition to cutting cabochons. So they are true members of the rockhound fraternity and not just owners of an attraction such as you often find. These people speak our language and are interested in seeing you find a nice diamond when you visit them. All 78 acres are open for search; however, nearly all of the recent finds have been made in one area of about six acres. Mr. Millar regularly has this plot plowed and the surface is constantly changed. It is located on the slope of a small hill, the ground slanting at from about three to thirty degrees. The entire area of the plowed plot consists of disintegrated and partly disintegrated kimberlite. It is in this formation that diamonds are found. The diamonds found vary in size from microscopic up to those of over ten carats. A stone of almost 16 carats was recovered last year by a lady tourist and several large ones have already been found this year. As to your chance of finding a diamond, well, that depends on the amount of work you are willing to do. The author observed some people just walking around the area, evidently expecting to see diamonds the size of acorns sticking out of the ground, others were on hands and knees moving slowly along searching the surface. Those who made recoveries were very exacting in their work, either sifting the kimberlite through their fingers and investigating any shiny bit, or carefully raking the ground with a small hand garden tool.

So far this year the recovery has been excellent; one man has found eight diamonds in one day, and two others found five each. Many others have found one or more diamonds in a day. One lady found a beautiful stone of a canary yellow color which when cut resulted in a very lovely 68-point stone. The Millars permit anyone finding a diamond to keep it, up to 5 carats in weight. Over 5 carats a royalty of 25% of its appraised value is paid to Crater of Diamonds. They do make a very reasonable charge of a dollar and a half for the privilege of searching. Mr. Millar keeps the grounds in a suitable form for easy looking A goodly share of the $1.50 is spent in this manner.

The Millars rock shop contains a nice

Technical Sergeant Budney entering the area where diamonds are found. Note the sign allowing you to select up to five pounds of specimens.

variety of cutting materials as well as custom-made jewelry. Trinkets are stocked for those only interested in souvenirs. They also have a very nice sandwich and soft drink stand inside the diamond-bearing area.

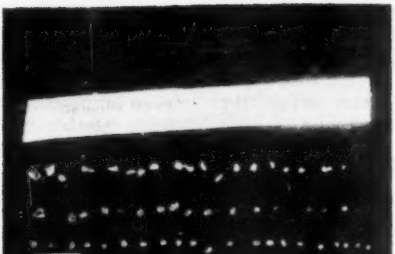
Agate, chert, feldspar, a few small garnets, and some very beautiful small quartz XLS were recovered by the author when he used his gold pan to concentrate about ten pounds of the disintegrated kimberlite. No large diamond was recovered in this small test but one small XL bit, smaller than a period as it appears on this page (.) was found. Considering the very haphazard manner in which the test was conducted, this was a pleasing surprise.

The author would like to see Mr. Millar increase the size of the plowed plot of ground to double its present size. This would enhance the property and should result in many more diamonds being recovered. It is realized that this will require the up-rooting of trees and clearing the area in general but it is believed that it would be well worth the effort. Even as it is, the Millars may be justly proud of their place. The rock shop is nice, the rest-rooms adequate, and the snack bar rivals any found in the big cities.

In addition to the rock shop, the Millars market a package of the kimberlite. Their advertisement regularly appears in these pages. These packets are very nicely prepared, cloth bags being used, with a suitable statement as to contents. Mineral collectors, sand collectors and anyone willing to take a chance will be interested in one of these packets as diamonds are regularly found in them. One gentleman recently recovered a flawless stone of over half a carat weight from the center of a small bit of the solid kimberlite. While in the rock shop the author picked up one of these bags as a sample and on reaching home could not resist opening it. A thorough search rewarded him with one small bit of chatoyant feldspar, a wee quartz crystal and a beautiful 29-point crystal of diamond! Needless to say, it was immediately added to his nice but small collection of minerals.

The idea occurred that this is an ideal way to solve the rock-hound's birthday and Christmas gift problem. Something unusual, yet reasonable in price, is hard to find for our rock-hound friends. Where else can you get a chance at a diamond at so reasonable a price as the Millars charge? So this year some of the author's

Looking into the diamond-bearing area. The old house covers the site of an early shaft.



Small tray of diamonds recovered from the property — some are exceedingly high quality, others commercial grade.

friends will receive packets of kimberlite as gifts. These packets are not "processed" by the Millars. The contents are just as they are dug from the site. The kimberlite varies from being completely disintegrated to solid kimberlite. Even if you are so unfortunate as to not discover a diamond, the kimberlite should make a welcome addition to the collection.

Due to an appointment, the author could not stay at the "Crater of Diamonds" as long as he would have liked. The short stay only whetted his appetite and you may be sure that before the year is out, that he will have returned in search of yet a larger stone! For those of you that cannot visit the Millars, send for one of the packages of kimberlite and have the thrill of searching for a diamond at home; for those that are taking a vacation this year—see you there!

Footnotes:

1. The "Crater of Diamonds" is an area of approximately 78 acres.
2. Owned and operated by Mr. and Mrs. Millar, Murfreesboro, Ark.
3. Average size of diamonds recovered (over 50,000 stones recorded): ten to thirty to a carat although stones of over 1 carat are regularly recovered.
4. Stones are harder than those from other diamond locations. They are found in all colors.
5. About 12% of the stones recovered will fluoresce.
6. While not the only diamond location in the United States, it is unique in that it has the only known diamond-bearing kimberlite deposits in these United States. Kimberlite is a greenish-black rock of the peridotite group. Mainly composed of partially altered olivine. At the Millars the kimberlite includes tuff and breccia which on exposure soon weathers to a soft greenish or yellowish mass and black soil. In this mixture most of the diamonds recovered through hand operations are found.
7. Diamonds have been found in the U.S. at a great many places. Aside from the Arkansas location there are four regions wherein diamonds are recovered from time to time: Great Lakes, central Kentucky-eastern Tennessee, Pacific Coast, and the Piedmont region of the Atlantic Coast.
8. The 15 plus carat stone discovered last year on the plowed plot of the "Crater of Diamonds" has been appraised by diamond merchants in New York as having a value of $75,000—not a bad day's work.

COLLECTING IN NEW BRUNSWICK, CANADA

By Lawrence & Harriette Schoppee

9 Greenbrier Street

Springfield 8, Mass.

The call of the wild came to us this year from New Brunswick. Not a mineral collector, not a mineral for sale did we find in the whole province, but minerals were there and in interesting variety.

The Provincial Information Station was our first stop over the border in St. Stephen. Those nice people directed us to the abandoned nickel mine right there in town. From the Information Station we continued on to the Queen Street blinker, turned left on Queen Street and drove to the end. We turned right and drove about 1.3 miles to a dirt road on the left where we drove in about half a mile to the farm of Glenn Pike who gave us permission to collect. There is plenty of nickel-bearing pyrrhotite around the mine, and some in the drill cores found in the field.

We drove on to Fredericton, the capital, to look at typical minerals at the University of New Brunswick. Nobody was around the geology department so we bothered the people at the Lands and Mines office adjacent and obtained directions to the antimony mine near Lake George. Any stibnite crystals nearer than Japan would be worth working for, we felt. Here are the results of our research.

From St. Stephen (because you won't have to travel so far for information) go north on Route 3 to Harvey Station. Turn left on Lake George Road. Drive about eight miles and turn right toward Lake George Village. About one mile farther, keep right at a fork. At 1.6 miles, turn left on a cart path just before a church and school. The mine is half a mile from the turn. Local people reported no activity at the mine and no objection to collectors. We found stibnite, massive and in acicular crystals about one-half inch long.

At the stibnite mine we met a couple of professionals, a geologist and a prospector, who directed us to a manganese deposit west of Woodstock. From Woodstock we drove west on Route 5 about 4.7 miles and turned right. About 1.5 miles from the turn-off are the mine workings in the field at the right. We picked up samples of lowgrade manganese ore in shale, not very interesting material.

The provincial government has sent us a number of good articles on recent discoveries and rediscoveries of mineral locations. As you probably know, about 1953 New Brunswick broke into mining news with huge base metals discoveries around Bathurst (lead, zinc, copper sulphides with iron sulphides). Many of the old known localities were reopened, and with new mining methods and new sources of electrical power, this province will rapidly become of interest to mineral collectors as well as miners.

Burnt Hill Tungsten Mine is one of the mines opened after years of neglect. In 1917 this mine was completely abandoned, the furniture and even the dishes on the tables. All buildings collapsed and brush grew over everything. Today a neat, efficient mining camp stands near the site of the old mine, and we are happy to report that mineral collectors are welcome. We found wolframite, molybdenite, cassiterite, beryl, pyrrhotite and fluorite, massive and in cubes and octahedrons. The manager gave us a lovely chunk of scheelite for our fluorescent drawer.

It is easier to drive to Burnt Hill Mine than to write the directions! Out of Fredericton on Route 8, drive north to Covered Bridge (Nashwaak Bridge P.O.). Turn left onto Route 25a over to Stanley. Continue on Route 25 through Cross Creek to Green Hill. Watch for

the Maple Grove sign, a left turn off Route 25. Five miles along the Maple Grove road is a railroad track, and a gate beyond which the road becomes the property of the Miramichi Lumber Company. Register at the gatehouse and pay fee. Drive 17 miles on a new dirt road to the tungsten mines and check in with the manager, at the second group of mine buildings.

Heading north again toward Bathurst we stopped over in Newcastle to check with the Lands and Mines office for specific directions to Heath Steele Mines, one of the big base metals works. From Newcastle we drove out Prince William Street, past the courthouse at the intersection of Route 8, keeping straight on to Chaplin Island Road and continuing more or less straight for 33 miles to the mine gatehouse.

Here the guard called the manager who sent a car and guide for us. The guide spent at least one hour showing us the several openings and stock piles marked "High Cu," or "High Ag." Two methods of mining are used at present, the open pit and the underground trackless adit using diesel trucks. Within a year the open pits will be exhausted and all workings will be underground. We were permitted to pick up samples, to take pictures and were privileged to talk with the geologist who gave us a beautiful specimen from his collection showing the lead, zinc and copper sulphides with accompanying chalcopyrite.

Heath Steele Mine was perhaps the most important stop in our trip as we could see what was actually being done with these huge base metals discoveries in the Bathurst-Newcastle area.

Brunswick No. 6 Mine about 32 miles out of Bathurst is being worked for the same ores as in Heath Steele, although on a smaller scale. Near Brunswick No. 6 is the old Drummond Iron Mine famous in New Brunswick mining history. The manager of Brunswick No. 6 can give directions for hiking over to the old Drummond. To reach both No. 6 and No. 12 mines from Bathurst, go southwest on King Street and continue approximately 32 miles, keeping left at the fork in the woods for No. 6, and right for No. 12.

There are many mines around Bathurst of sufficient variety to keep a collector busy for about a week, but we decided to pick and choose representative locations that might be particularly interesting to collectors and still be typical of what New Brunswick has to offer.

A manganese ore prospect was mentioned as being west of Bathurst, with crystals of pyrolusite found there. We drove north on Route 11, turning left at the Tetagouche sign and keeping on the south side of the river. The prospect is on the right approximately 11 miles from Route 11 and is located near Tetagouche Falls which are really spectacular. The Canadian Mining Co., Ltd., is the controller of the property. We don't believe what we found is pyrolusite because it is much harder, so we are marking it polianite, manganese dioxide. There are some crystals in the vugs, too, although Ford's Dana states that polianite crystals are found only in Czechoslovakia! We think this mineral is too hard, too light colored and too shiny for manganite.

As a contrast to the metallic ores of the north we found the gypsum, coal and limestone beds, the natural gas and oil wells of Southern New Brunswick equally interesting. At Hillsborough is a huge gypsum processing plant. The proprietors will show interested people around the mine and describe the mining and uses of gypsum. Some gypsum quarries are closed to collectors but we were given directions to one location on the road to Albert Mines. Off Route 14 south of Hillsborough, turn right toward Albert Mines and drive about 4.8 miles to Cap de Moiselle postoffice (sign on private dwelling). Almost opposite the postoffice is a road to the right. We drove six tenths of a mile on that road and turned left into a field, from which the cliffs of gyp-

sum and anhydrite were plainly visible. We found small selenite crystals in the gypsum. An underground lake created by mining operations can be reached by crossing the brook at the foot of the cliffs and following the path over the hill.

Albert Mines is the site of coal mining pits and dumps from which was mined a large amount of albertite coal, so named for the town and county of Albert. After the discovery of albertite in our Connecticut Valley traprock we wanted a sample of albertite from Albert Mines for our rock collection. To reach the old dumps we drove west off Route 14 on the same road as to the gypsum beds, but not as far. About two miles from Route 14 at the foot of a steep hill, turn right, just before a church. About two miles on the right are the old shafts and dumps. We found the nicest specimen in the brook, surrounded by for-get-me-nots!

Copper prospects are mentioned at several places in Southern New Brunswick but there is no active mining. A great many feet of test bores were drilled at Goshen but even at 200 feet the conglomerate showed only spotty amounts of malachite. To see this operation first-hand, go to Goshen which is on Route 39, south off Route 2 and northeast of Sussex. One mile southwest of the center of town is the house of Harold Layden who owns the property. Permission will probably be granted to visit the workings which are up the hill opposite the house, about a 20-minute walk.

We went northward again to Havelock which supplies cement to the Maritime Provinces. The Canada Cement Co., Ltd., will give samples of limestone off their conveyor belts, and their chemist will give a most interesting description of the work and history, but nobody can set foot outside their office building! They are very proud of their safety record and are taking no chances.

Before the lead, zinc, copper ore discoveries, New Brunswick's chief mining activity was centered at the Minto-Chipman coal fields. Here coal was first mined on the American continent, and was shipped down to Boston, clearing the Reversing Falls at St. John when the tide was slack. The coal workings are another spectacular sight. Huge draglines remove 90 *feet* of overburden in order to recover 20 *inches* of coal. And they told us it pays! A highpoint of our trip was a ride in the cab of one of these enormous draglines. It seemed like a monster from Mars. We visited the Miramichi Lumber Company mine just north of Minto, and no one seemed to mind visitors, even if they picked up samples.

One of the newer prospects for lead, zinc and copper sulphides can be visited at Nerepis on Route 2a, north of St. John. Opposite the cemetery in Nerepis is the home of Mr. Frank Dugay, owner of the prospect, who welcomes visitors and had a box of samples ready for collectors. The future of this prospect is uncertain but the samples looked as rich as those from Heath Steele or Brunswick No. 6.

On a day off at the beach at St. Martins, we found large masses of jasper in conglomerate at Cave View Beach. It pays a mineral collector to keep his eyes open all the time!

We've concentrated on a report of the natural resources of New Brunswick which might be of interest to the mineral collector. Intermixed with collecting were dozens of picture stops: at weaving shops in Havelock and Gagetown; at 32 covered bridges scattered over the province, including the longest in the world at Hartland; at fish weirs to photograph ten-pound Miramichi River salmon; at Pokemouche Junction to snap a picture of the peat bogs; at a cheese factory to record the steps in making Canadian cheddar; at Rothesay to catch the whirling dancers at the Gathering of the Scottish Clans. What more is necessary to please the mineral collector and his wife?

We hope you will be able to visit this wonderful country and its hospitable people.

Crystal Therapy in the American Southwest

By Ronald L. Ives, 251 Lincoln Ave., Palo Alto, Calif.

For several generations, archaeologists excavating ancient Indian ruins in the American Southwest have come across mineral crystals, fossils, and concretions among the effects buried with Indian bodies, or associated with other artifacts in house ruins. As these mineral substances were without apparent utility in the Indian cultures, their use was not immediately understood, and not a few field workers dismissed them as "pack rat" collections of shiny, odd, or interesting objects, having no place in the Indian culture.

About fifty years ago, the late Dr. F. W. Hodge, working among the pueblo people, gained the confidence of some of the older tribal medicine men, or *shamans*, and learned that these shiny minerals were used in a variety of healing rituals. About forty years ago, the late Dr. Earl Morris, working in various parts of New Mexico, made a similar discovery. Both men planned eventually to publish descriptions of the healing ceremonies, but had promised to remain silent while their informants were living, and neither lived long enough to write descriptions of a most interesting primitive use of minerals. Some of this information may be lost forever.

During the course of more than a quarter of a century of contact with various Indian groups in the southwestern United States and northwestern Mexico, the writer has come across a number of instances of the use of mineral substances in Indian "healing magic". Summary of field findings will be presented here, with a certainty that it lacks completeness, and a hope that other workers will eventually fill in the hiatuses.

In most, but not all, Indian groups there is an individual who is reputed to have a magical or supernatural powers. This individual is usually referred to as a *shaman*, although his exact title depends upon the tribal language. A shaman may be either a man or a woman but male shamans are more common. Some gain their reputations for magical powers because of epileptic fits, mild insanity, severe glandular unbalance, or a crooked spine. Others undergo a period of rigorous training by other shamans before they qualify in their own right. Their intelligence ranges from near feeble-minded (rare) to near genius (also rare). Most seem to be of above average intelligence, and some shamans not only have a wealth of information in the natural sciences, but have very clear ideas of the courses of many diseases, including the fact that some are contagious, like smallpox, and others are not, like cancer.

Most shamans, of whatever tribal affiliation, have a basket or bag of medicaments, much like the Doctor's "black bag" in our culture. Contents of these bags is not entirely standard, but usually includes such items as bunches of feathers of religious significance; sundry herbs, some of recognized medicinal value; and one or more mineral substances.

Of these mineral substances, clear quartz crystals are by far the most common and widely distributed, being found from central Texas to the tip of Lower California (Mexico). White and yellow topaz crystals have been found in Indian burial sites in west Texas, near Marfa, and a large white topaz was seen in a shaman's collection in the same area in 1938. Large crystals of dog-toothed spar are still used in the mountain areas of Mexico, along the Sonora-Chihuahua line. Several large red garnets, reportedly recovered from the centers of petrified logs, are contained in shaman's baskets in the vicinity of Winslow, Arizona. Polished nodules of malachite and azurite, some containing a "spirit eye", were popular near Prescott, Arizona, but local

Indians assure the writer that they are now good Christians, and don't use "such foolishness" any more. Other mineral substances currently used by shamans include a Folsomoid arrow point, a fossil shell, and a half concretion, apparently formed about a sand-dollar.

Use of these minerals in healing is varied, but the process usually includes a substantial gift to the shaman, a period of prayer, fasting, or dancing, and a diagnosis, which may include some sort of divination, to determine exactly what the ailment is. When the shaman has determined the nature of the trouble; the crystal, arrow point, or fossil is soaked in a fluid, commonly water, but occasionally a brew of peyote (mescal buttons), cactus juice, tezguina (corn beer), or tequila; prayers are said over it; and the patient is given the fluid to drink. The magic crystal is returned to the Shaman's basket for use with the next patient.

Until recently, these treatments were commonly regarded as pagan mumbo-jumbo, perpetrated by pious frauds, and capable only of curing flatulence of the pocketbook. More recent studies show, however, that they are very effective in curing psychosomatic troubles, provided that the patient has confidence in the shaman; and that some of the fluids in which the crystal is soaked are in themselves of medical value. Peyote, for example, contains *mescalin*, a narcotic, capable of deadening some types of pain; and the cactus juices, when fermented, contain alcohol and cactus esters, which will deaden a temporary pain, and postpone a longer-lasting pain until tomorrow.

Diagnosis, in Indian societies, is commonly done in private, as in our culture. Crystals are reportedly used in this preliminary to healing, as well as in the healing process itself, but shamans are rather reticent regarding the particulars. It is reported that the nature of the sickness is made clear to the shaman after he inspects the patient through a transparent crystal.

One Apache shaman, called a *berdache* by the tribe, has modernized the diagnostic procedure considerably. In place of natural mineral crystals, cut glass chandelier pendants, purchased in a Tucson used furniture store, are employed. These pendants, when properly oriented and pressed together in a bright light, produce "magic rainbows", whose shape and size indicate the sickness. We call these "magic rainbows" Newton's Rings.

From legendary prehistoric times until about 1880, abalone shells were traded eastward from the Pacific coast at least to the Mississippi Valley, and were used for both ceremonial and decorative purposes. It was the finding of these blue shells among the Indians of central Sonora that convinced Father Kino, about 1695, that there was an easy route from the mainland of Sonora to the "island" of California. Kino's "quest of the blue shells" led to his eventual discovery that California was indeed a part of the American mainland, and to the publication of his famous map "Passo por Tierra a la California" in 1701.

Indian employment of mineral resources was not limited to crystals for medicinal and ritualistic use, but included extensive arrowhead material mined in many places, such as Bishop, California, and Parika Pass, Colorado; and "face paint" mines at such places as Kelly's Hole, Utah, and New Almaden, California, to name only a few of thousands.

This brief excursion into the ceremonial use of minerals among the southwestern Indians shows mineral usages closely paralleling those among the ancient Aztecs, who venerated jade; and resembling in some respects the magical use of gem stones in Europe and Asia from prehistoric times until only a few generations ago. In some medieval folklore, the magical properties of gems are described at great length, including their use to protect against everything from poison through arrow wounds to "the French disease". It took mankind quite a few milennia to find out that crystal magic didn't work very well.

GEM COLLECTING IN MONTANA

By Chief Warrant Officer Vernon R. Braun

President of the Arrowhead Mineral Club

Great Falls, Montana

In the early spring of this year, after much discussion, it was decided that the Arrowhead Mineral Club would conduct a rock-hound caravan around the western part of the state of Montana as a new club enterprise, with the departure date being set for 13 July 1957 and invitations being extended to the Mineral Clubs at Bozeman, Helena, Livingston and Butte. Since it was the first trip of this type that we were to sponsor as a club enterprise, H. G. (Bob) Clark and Lt. Col. Q. D. Howell were assigned the project of mapping out the trip, establishing camping locations, equipment requirements and figuring out the financial expenses that could be expected. This was accomplished in advance and as a result paid big dividends, with each individual being provided a schedule of events for the two-week trip.

The caravan, consisting of 30 avid and hardy rock-hounds, departed on schedule at the unearthly hour of 5:00 A.M. with much sleep still in their eyes, befuddled minds and great expectations, from Great Falls up through the beautiful, geological and historic Missouri River Canyon to Helena, Montana, where everyone replenished the inner man and 10 members of the Helena Gem and Mineral Club joined the Caravan. Dr. and Mrs. H. Perry Bynum flew in from Memphis, Tennessee, the morning before to join the caravan and spent the day as guests of several members who managed to work down their excess stock of cutting material and minerals by several hundred pounds through donation to the Bynums and thereby increase their total gross weight for their return trip to Tennessee.

From Helena the Caravan headed west to the sapphire diggings located near Phillipsburg on Rock Creek where sapphires ranging in color from blue, green, pink, yellow and white and in size from one-half to four carats were found by all members by digging in the alluvial gravels. Everyone found sapphires—some even hit the jackpot—just ask Mary and Wes Chamberlin of Great Falls and Lyn Sawyer of Helena. One member who had made previous trips to the diggin's managed to stir up a great deal of intense interest with a few of the more gullible members of the tribe by salting one of the holes with a handful of sapphires at an opportune moment and then calling their attention to all the stones he was finding. At that time he was almost mobbed and moved out of his hole by one of the more avid members of the collecting fraternity.

The night was spent at the Skalkaho Guest Ranch, operated by Mr. and Mrs. Harry Bentz, who are wonderful hosts and who served a very delicious evening meal and breakfast the next morning at reasonable prices. The majority of the party slept out and then departed early the next morning by way of Anaconda for Crystal Park, located out of Elkhorn Hot Springs, where everyone found perfect terminated quartz crystals ranging from clear to smoky and amethyst. Some of the more fortunate even found scepter crystals, with the base being smaller than the termination. The evening was spent at Elkhorn Hot Springs where a delicious ham dinner was served and then the majority of the party whiled away the evening hours by swimming in the hot springs. Part of the group slept in cabins and the remainder slept in the little park adjacent to the hot springs, between the garbage cans and the bears. One member thought that she was going to have a sleeping partner when a brown bear stuck his nose into her sleeping bag but decided that it wasn't the place for him to den up for the winter. The next morn-

ing the caravan assembled in Dillon, where Barney Braun was made a member of the BELLMEN OF THE MOUNTAINS in a ceremony on the main street –more about his lodge behavior later.

The morning was spent in the Frying-pan Basin northwest of Dillon where everyone collected all the petrified and opalized wood they could carry. Logs ranging in length from five to 50 feet were found with a diameter of one foot to five feet. Dr. Bynum expressed a desire for a souvenir in the form of a set of rattlesnake rattlers. The words were hardly out of his mouth when several of the members obliged him by killing and presenting the doctor with nine sets of rattles. This was in keeping with the old saying, "Ask and ye shall receive." The party then departed for the wonderstone location which is approximately half-way between Dillon and Alder, where everyone picked up all the beautiful banded wonderstone they could squeeze in their cars and still left enough to satisfy the requirements of all the rock-hounds in the United States for the next 50 years. An interesting side note to this location is that a piece of the wonderstone with a replica of the state of Montana is in the U.S. Capitol in Washington, D.C. This material may be gathered in any size piece and I believe that it is superior to that found in Nevada and New Mexico. The caravan then drove to Virginia City, stopping at Ruby Gulch to look for gem quality garnets, but they proved to be elusive so no garnets.

Virginia City, the former hangout of the notorious Sheriff Plummer, proved to be an ideal place to spend the evening and an enjoyable buffet luncheon was had at the Wells Fargo Cafe. The party then broke up for the evening and spent the remainder of the day visiting the historic sights and looking at the antiques in Virginia City, with some of the more rugged individuals (females included) camping out and sleeping with the local celebrities of days gone by in Boot Hill. Roll call was taken the next morning and it was noted that none of the party had joined the local permanent citizens. Yours truly got sucked into a deal with Colonel Howell in going back to the wonderstone location to look for Doctor Bynum's purse, which he thought he had lost there. The trip was made after dark with Colonel Howell doing the navigating the first part of the trip, getting us thoroughly lost and giving us a scenic tour of southwestern Montana of approximately four hours after dark prior to getting back to the wonderstone location. A diligent search was made for the doctor's pocketbook to no avail and when we arrived back in Virginia City his wife walked up with the good old green folding stuff. She had located it in the back seat of Bob Clark's car. And so to bed.

The next morning the group drove down the beautiful Madison River Valley, which incidentally is one of the best fishing spots in the Northwest, to the Yellowstone Mines located out of Cameron where everyone carried off all the steatite they could pack, thereby insuring their supply of carving material for the long winter evenings. From there the group drove to the asbestos mines located near Hebgen Reservoir where we met a noted character of many western summers by the name of Jim Clark. He graciously directed us to the asbestos mines, where fine specimens of asbestos, idocrase and tiger-eye were collected, and then invited us back to hunt elk in October. Doctor Bynum, Colonel Howell and crew stopped in the meadow below the asbestos mines and added a fine collection of western wildflowers to their already bulging load. The group then split up for a one-day tour through Yellowstone Park, visiting all the geysers and the majority camping out at Roosevelt Camp overnight, getting a good night's sleep with occasional interruptions from the bears who wanted to see if they could scrounge some home-cooked food.

The next day was spent at the staurolite location on a mountain at the foot of Yankee Jim Canyon of the Yellowstone where everyone got plenty of staurolites, both in singles and in matrix groups, and

from there we went to the head of Tom Miner Basin, where we made camp.

Friday and Saturday we saw more steep mountains, consisting of 21 separate layers of volcanic flow, more petrified wood and agate, and more mountain showers than any of us had experienced. This was truly the highlight of the whole trip and complete trees were observed in both vertical and horizontal positions which were highly agatized and petrified, ranging in size from one foot in diameter to 15 feet in diameter and in length from five to 75 feet, with many smaller limb sections from an inch to five inches in diameter.

The first morning lodge member Braun sounded reveille on his cow bell and all that he waked up were the horses, who went through the fence and headed for parts unknown. Wranglers Saksa and Dutchek took to the trail with a dim view of this horseplay and after a real early-morning workout succeeded in getting them back in the corral. Braun got back into their good graces by providing them each with a can of beer for their breakfast. However, Tom Miner Basin lived up to its reputation for providing rugged exercise and good cutting material as we gathered many a blister and discovered many muscles that we hadn't used before, along with green, brown, red, black, yellow and clear agatized wood and jasper, as well as an amethyst find made by Clark, Armstrong and Saksa. But don't ask any of them to take you to the place, as all those hillsides and mountainsides look too much alike. A pleasant acquaintance we made on this part of the trip was that of Mrs. Edith Ritchy of Gardiner. An avid rock-hound of over 70 summers, she accompanied us and took off up the mountains like they were her natural habitat. She also has a collection which is interesting and attractively displayed. Her acquaintance and that of the Bynums are valued and they added much to the over-all enjoyment of the trip.

From what I can dig out—about one-half ton of specimens was shipped back to Tennessee, so if you find a large hole at your favorite collecting spot, just blame the Bynums for not dumping all their treasures in that hole instead of shipping it to a dark basement where they will gloat over their plunder for years to come. After scaling the 10,000-foot peaks in Tom Miner Basin, Dr. Bynum was heard to repeat the immortal words of the ancient warrior when he said—Vini, Vidi, Vici, which translated means—I came, I saw, I conquered.

We appreciate having rock-hounds from the populace East come to Montana who prove to be such wonderful sports and real people. To the two of you—and the rest who have visited us in years gone by—always remember the latch string of Western hospitality is hanging within your reach and we welcome you to be with us whenever you can. To those of you who could not make the trip, we regret not having made your acquaintance, but we are willing to trade some of our excess plunder to you if you will only contact us. Credit for seeing that the trip proceeded smoothly is also given to Colonel Q. D. Howell who was always mindful of the welfare of the group and did the best job of wrangling errant rock-hounds who were apt to stray and miss the caravan at some unpredictable spot. We stayed together and had fun together and there were no sore-heads in the lot. This being the first trip of this kind that we attempted, there were many places and ways that the trip organization could be improved, so all who intend to attend the forthcoming trip to western Montana, Idaho and Oregon in the summer of 1958 should start thinking and come up with ideas for us to use this next summer when we go again.

So ended the trip and by this time we were all so worn out from traveling and mountain climbing and so loaded down with loot that we all went home to brag about our finds, spend the remainder of the year cutting and polishing our treasures, and trade with those who were unable to go with us.

WORLD NEWS ON Mineral Occurrences

ITEMS ON NEW FINDS ARE DESIRED
PLEASE SEND THEM IN.

ALABAMA—"Pyritohedron xls of pyrite about 1/32" to 1/4" in size occur on white marble in Talladega County, Ala., at the quarries at Sylacauga. These are very attractive but I can't keep any specimens as everyone that sees the bronze and green xls (tarnished pyrite) in contrast with the white marble just have to have some. The unfortunate part about this item is that the quarry crushes into powder all marble that has these and other imperfections, therefore, unless you are lucky or have a friend there to take out a chunk when it shows up, a trip there would be in vain. I know because I have made many trips and came back empty-handed, but I had lots of fun anyway."—note from James Miller Davis, 212 Guaranty Savings Bldg., Montgomery, Ala.

ARIZONA—Mrs. Irene Barber, Rt. 9, Box 907, Tucson, Ariz., sent in an attractive specimen consisting of glistening, colorless, drusy calcite on dark red hematite.

"From Glove Siding, Santa Cruz Co., Ariz."—on label.

ARKANSAS — The following letter, dated April 8, 1957, comes from Byron C. Marshall, 204 Central Ave., Hot Springs National Park, Ark.

"On July 23rd, 1956, I collected some mineral specimens from Magnet Cove, Hot Spring County, Ark. I sent four samples to the Smithsonian Institution, United States National Museum, Washington, D.C., and Dr. George Switzer identified these for me. Number 4 was Sericite, a very fine grained form of muscovite mica, and after spending much time looking through the literature, this sericite seems to be a new mineral recording, not only for Magnet Cove, but for Arkansas.

"In one part of the large five-square-mile Cove there is quite a number of large lumps of this light, palest greenish-gray sericite, in massive form, slightly tinged tan in places (mostly on the outside of these boulders), and in places showing a fibrous structure, which if not actually plumose is very suggestive. These boulders and slabs had been mined out of the ground, in previous mining operations, and it was from these sericite chunks that the other minerals sent as samples to the U.S.N.M. were in association with.

"Sample No. 1 was sericite, with many pale yellow, into deep yellow, and pale to dark green to brown crystals of garnet. Don't ask me what kind of garnet they are. I can assert, however, that they are not the more common type of garnet of the Cove, which are much larger and dark brownish to black.

"Number 2 was sericite with green crystals of idocrase (vesuvianite). One I have is the bigger part of a broken crystal of idocrase, ½x1x1", but they get very much larger than this. With this particular specimen were white natrolite crystals, and colorless prismatic crystals of apatite, and dark amber garnet crystals.

"Number 3 is interesting, and a new record for Magnet Cove, and undoubtedly Arkansas too, even if uncertain of some points. The white blocky crystals are not single crystals but a silky white

fibrous aggregate of natrolite. They are apparently a pseudomorph of natrolite after some other mineral. These are associated with the sericite.

"Most of sample No. 4, the sericite, had, in the several samples collected, various combinations of the above mentioned minerals, and it seems that these constitute the association that was represented in this spot in the Cove, excepting that the massive lodestone, quite magnetic, was very common here also."

CALIFORNIA—"Enclosed find a few specimens of chiastolite xls (andalusite) which my wife and I picked up along a road cut in Madera County, Calif., near Cathay. We were directed to the spot by a friendly Rock Shop owner, Mrs. Rowland, whose husband owns and operates a slate quarry and gold mine at Cathav or near Fresno.

"Our references tell us that these crystals were pierced and worn by early Christians as faith amulets because of the cross formation.

"We thought you might be interested in comparing with staurolite crystals which you may have.

"(Spent the winter rock-hounding)." —item dated June 5, 1957, from Nelson L. Goudreau, Epoufette, Mich.

Five small gray chiastolite xls received showing typical black markings. One had a nice cross in it.

COLORADO — The following letter, dated Sept. 5, 1957, comes from Mrs. Lottie Shipley Rohde, Shipley's Mineral House, Gem Village, Bayfield, Colo.

"We have subscribed for R&M for many years and have always enjoyed and always look forward to each new issue.

"Year by year our trade with eastern people has grown. Hundreds of eastern Rockhounds visit our store each year, so we have decided to start advertising in R&M. We have many tons of good material from everywhere and most of it was collected when collecting was good. We are sending you under separate cover a nice specimen of blue barite from Sterling, Colo. This is rare and hard to come by and we feel fortunate in having purchased a fine collection.

"Come and see us sometime, Mr. Zodac, if you can ever get away from your office. The latch string hangs on the outside."

The specimen received is a beautiful one—a group of three platy bluish barite xls. It is the finest we ever saw from the locality. Thank you for your kind invitation to visit you. The Editor will remember it when he makes his next trip to Colorado—possibly in 1958.

CONNECTICUT — "I have recently found what I have been told is rutilated mica. Would you please check this sample and tell me if it is unusual enough to warrant attention in World News Occurrence column?

"It was found in pegmatite of the Waremaug formation which intruded the Peck Ledge of Coltsfoot Mt. of Cornwall in the county of Litchfield, Conn.

"This is the first occurrence of rutile (if it's rutile) of which I have heard in Cornwall."—letter dated Aug. 8, 1957, from Robert Bailey, West Cornwall, Conn.

The 3x3 specimen received it not rutilated but dendritic mica consisting of a thin colorless muscovite intruded by black, branching dendrites (manganese oxide). Even if it is not rutilated, it is still an interesting specimen.

DELAWARE — From Bowers Beach (N. side of Murderkill Creek), Kent Co., Del., we have a small dark gray chert pebble containing a crust of colorless selenite. The pebble was collected by Bob and Hazel Reynolds, 470 Stockdale Rd., RD 2, Glenarm, Md.

FLORIDA—""The Ballast Point geode area near Tampa, Hillsborough Co., Fla., is definitely closed. It is posted with huge signs saying 'NO ROCK HUNTING.' They have plans for tearing down the buildings on the beach and pier. They are going to build a boys' club and haul sand in for a sand beach.

"We are going to take a vacation in August and try to find a new location

for hunting geodes."–letter dated July 23, 1957, from Geo. Williamson (Rock & Shell Shop), 2036 S.W. 57th Ave. (Red Rd.), Miami 44, Fla.

GEORGIA – "Four colorful minerals, cacoxenite, dufrenite, strengite, and beraunite, can be collected 3.5 miles west of Etna (Polk Co.), Ga., on the dump of an old iron pit. All four minerals are iron phosphates, and are known from few enough localities in this country to be considered rare.

"'The cacoxenite is bright golden yellow. It forms silky tuffs and masses of fine radiating fibers which either fill or project from the walls of small openings in 'iron ore.' Some of the tuffs are 2 cm across.

"The dufrenite ranges in color from bright yellow-green to pale olive to dark green. It forms botryoidal masses and implanted globules which are made up of concentric layers of radiating fibers. The individual layers vary in thickness from a few hundredths of a mm to about 2 mm. The globules are commonly 3 mm across, occasionally as much as 3 cm.

"The strengite is colorless to pale rose, in perfect orthorhombic (?) crystals up to 3 mm long which are in radiate groups on fractures and cavity walls in the 'iron ore.'

"The beraunite is bright reddish brown, in crust-like masses and dusty coatings which, magnified 10x, are seemed to be clusters of crystals.

"'All four iron phosphates are closely associated on fractures and in small cavities in a rock which is composed of quartz and goethite." - - -

Mineralogical notes by Vernon J. Hurst, Georgia Mineral Newsletter, Summer, 1957, P. 55 (Published by the Georgia Geological Society, 19 Hunter St., Atlanta, Ga.–A. S. Furcon, Editor).

IDAHO – Philip R. Cosminsky, 509 Timberlane, Falls Church, Va., sent us two very nice quartz geodes which were collected in Twin Falls County in southern Idaho. Both are dark brown in color but lined with pale bluish chalcedony.

The label reads:

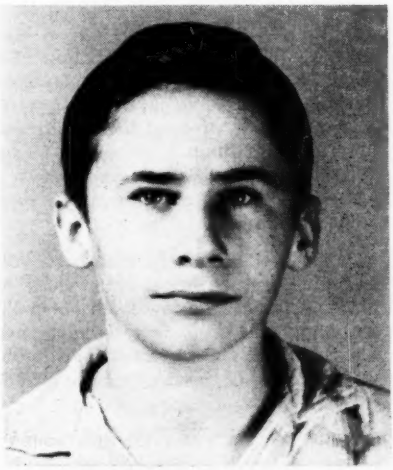
"'Chalcedony lined geodes–three or four miles north of the Nevada-Idaho line on U.S. 93, Idaho.

"Taken from road cut on U.S. 93, exact mileage from State line not noted, but this road cut is brown, all others are sandy or white.

"Geodes from one to four and five inches in size. Some few contain tiny quartz xls and what may be hyalite. Some are solid and polish into nice thunder-eggs (thousands of them)."

ILLINOIS–"I am 14 years old and in my freshman year at the Lakeview Jr.-Sr. High School. I have been collecting minerals for about three years and am so interested in them that I plan to be a mineralogist. Through R&M I have bought a number of rare specimens that I could never hope to find unless I was pretty lucky. I belong to the Explorer Post 101 and have a paper route on the Decatur Review. Enclosed is a picture of myself taken last year.

"Some of the minerals that have been found around Decatur (Macon Co.), Ill., are agates, chalk, concretions, garnet, geodes, hornblende, mica, microline, quartz and tourmaline; rocks found are gneiss, granite, pegmatite, sandstone, schist, and shale, and various types of sand (mostly calcite sand). All of these



Richard D. Armstrong

items, including some fossils, have been found by me—the agates, granite, sandstone and fossils are the most common." —letter dated Sept. 22, 1957, from Richard D. Armstrong, 1036 N. 33rd St., Decatur, Ill.

INDIANA — "Here are a couple of specimens I found in an area where gravel deposits exist but are not being worked. This is near Marion (Grant Co.), Ind.

"I think that one is calcite with small mica phlogopite xls, and the other one I believe is calcite with small graphite xls.

"I have never found such as these before and thought that you might be interested."—letter dated Aug. 24, 1957, from B. E. Coffman, 1115 S. Adams St., Marion, Ind.

Mr. Coffman's identifications are correct. The first specimen consists of tiny bronzy phlogopite xls in coarse xline white calcite. The other consists of tiny black graphite flakes in coarse xline grayish calcite.

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"This note is to inform you that the place where I work (a gravel pit) has been closed to rockhounds. In fact I lost my job there two weeks ago on account of some jealousy over me and my visiting rockhound friends."—note dated Aug. 10, 1957, from Harold S. Johansen, P.O. Box 293, Fortville, Ind.

IOWA—"What are these? Found at a coal strip mine about two miles south of Knoxville, Iowa, in Marion County. There are quite a few of these scattered about on the dump."—note sent in by Michael Papcun, RR 1, Melrose, Iowa.

The specimens are dark gray xline calcite concretions.

KANSAS—Peridotite, a dull green volcanic rock cut by thin white veins of calcite, is found as a low knob about 20 feet high and 200 feet in diameter near Bala (Riley Co.), Kans. This knob, called a plug, is the neck of an ancient volcano.

KENTUCKY—"Louisville and vicinity is predominantly a fossil country and I belong to a geology group that does considerable collecting. Just last week we visited the Falls of the Ohio where there are thousands of fossils from which the collector may choose."—letter dated Oct. 28, 1957, from Mrs. Frank Smith, 1818 W. Lee St., Louisville, Ky.

A deposit of limestone in which corals are especially abundant is known as a coral reef. One of the most famous of these coral reefs is crossed by the Ohio River at Louisville (Jefferson Co.), Ky., where it forms the "Falls of the Ohio."

LOUISIANA — Brown, banded agate pebbles have been found in a huge gravel pit near Monroe (Ouachita Parish), La.

MAINE — The following item, dated Nov. 4, 1957, was sent in by Gunnar Bjareby, 147 Worthington St., Boston 15, Mass.

"Usually I manage to get up to the mine and quarries on Hall's Ridge of Plumbago Mtn., Newry (Oxford Co.), Maine. This time and at the last year's visit I found large cleavages of the quite rare phosphate species dickinsonite. This is the second reported locality for dickinsonite in Maine; the first is the Barry Quarry, Poland. The original find was at Branchville, Conn. Later it has been found in Portland, Conn. I found dickinsonite in 1941 at the Smith Mine, Alexandria, N.H., and in 1942 at the Palermo Mine, North Groton, N.H., associated with palermoite xls. In 1956 it turned up at the Chandler Mills Mine, Newport, N.H. In recent years it has been found at the Nancy No. 2 Mine, North Groton, N.H. There it was associated with graftonite and has a dark grayish-green color. I am not familiar with the Branchville material but the color at Barry and Palermo is olive to bottle-green, at Chandler Mills it is yellowish-olive. The Newry material is like the Nancy cleavages but somewhat bluish. Dickinsonite easily could be confused with cleavages of the darker varieties of manganapatite by the casual observer."

MARYLAND — Black magnetite xls have been found in chlorite near Deer Creek (Harford Co.), Md.

MASSACHUSETTS – The following item, dated Nov. 4, 1957, was sent in by Gunnar Bjareby, 147 Worthington St., Boston 15, Mass.

"At a recent visit to the Manhan Lead Mines in Loudville (Hampshire Co.), Mass., I found the relatively rare lead mineral leadhillite. It occurs as small pseudohexagonal and platy, pale blue crystals in quartz which is honeycombed with exsolution cavities after former calcite crystals. Micro crystals of other lead minerals were collected such as: pyromorphite, stolzite, wulfenite, anglesite, cerussite, galena in various stages of alteration and traces of minium. Sphalerite and chalcopyrite masses. Small xls of covellite were found in some cavities after galena. A kaolin-like white unidentified mineral, was noted. Many of the cavities are coated with a later generation of quartz xls, some of which are extremely small. There are other copper and lead minerals such as: malachite and possibly azurite, aurichalcite, linarite and caledonite. No xls of the last four were found so their presence can be conjectured only. It is possible to find pyromorphite, wulfenite and stolzite xls on the same specimen. Anglesite might be found inside altering galena xls with or without cerussite and rarely with covellite xls. The wulfenite xls are platy prisms with short pyramidal faces, giving them a tabular appearance. They are usually much less than 10 mm and have an orange or orange-red color, rarely yellow at this locality. For the micromount collector the localities are well worth visiting."

MICHIGAN–The following item was sent in recently by John F. Mihelcic, 16543 Appoline, Detroit 35, Mich.

"Agates and a variety of feldspar known as peristerite are found with other polishable pebbles at Agate Beach, just nine miles west of Toivola (Houghton Co.), Mich. Aside from picking up treasures, the dip into Lake Superior is a treat (in summer, of course)."

MINNESOTA–Brownish, pitted chalcedony pebbles have been found in gravel pits around Hopkins (Hennepin Co.), Minn., by Adolph A. Sidla, 201-15th Ave. No., Hopkins, Minn.

MISSISSIPPI – The following letter, addressed to the Editor of R&M, was sent in by J. S. Locke, 39-48th St., Gulfport, Miss.

"Looked for you to drop by around the end of last March or first of April. Was a little disappointed when you failed to show up. I had a little surprise prepared for you but will give it to you now so you can use it in the first available issue.

Six miles east of Raleigh (Smith Co.), Miss., on the highway to Bay Springs (Jasper Co.), Miss., you will cross a creek, small and muddy looking. As you start up the first hill you will notice that it is composed of lime. Stop the car on the shoulder and walk north along the face of a lime bluff for ⅜ mile (estimate) until you come to a large spring flowing from the bluff. Follow the spring to the bluff where it is emerging from a cave.

"To my knowledge this cave has never been fully explored. One old timer, 86 years old, who has lived nearby nearly all of his life, told me he once went in for about 90 feet but it got too narrow. He also told me that during the Civil War a couple of Union deserters had a cobbler shop in the first big room, where they remained for the duration. He further told me that when the cave was first found that the skeletons of two Indians were found in the mouth of it.

"When I visited the site I was not prepared and had no flashlight. I went around the first bend and all I could see was darkness, no rays of light. This trip is only for the stout hearted, as the ⅜ mile to the cave is through dense underbrush and the countless millions of shell and other ancient sea life embedded in this bluff will make you waste time as your curiosity gets the best of you. The cave may turn out to be a dud but the bluff will repay you. A lot of these fossil shells crumble at a touch so, if you want some specimens that will remain intact, go back to your car and

proceed east on the paved highway keeping a sharp watch on the north side of the road. Soon you will see an extra-high hill with a lime bluff protruding out of the side. Park here and prospect the hill all of the way around. Specimens are plentiful—a fossil hunter's paradise!

"Am sending you a piece of what I call coquina limestone. It was taken from the foot of the bluff where it had rolled after being broken from the top. It may interest you."

The specimen received is not coquina but common fossiliferous limestone. It is a dark gray (stained brown) compact limestone full of white fossil shells. Some of the shells fl. yellow under long wave.

The Editor is very sorry in not showing up as promised. Work had him tied down for fair. But do not give up hope, Mr. Locke, he may drop in on you before the year is over.

MISSOURI — Joseph A. Schraut Jr., 4125 Fillmore St., St. Louis 16, Mo., informs us that thin veins of yellow carnotite have been found in a limestone quarry near St. Genevieve (St. Genevieve Co.), Mo.

MONTANA—"Hyalite opal, associated with an unidentified uranium mineral, was collected from the Paymaster claim in the fall of 1955. This is one of several uranium claims in the vicinity of the Zonolite mine properties at Libby (Lincoln Co.), Mont. These specimens fl. in short wave U.V. light a bright yellow-green."—note sent in by Gerald Navratil, 243 Farragut Pkwy., Hastings on Hudson, N.Y.

NEBRASKA—Everett Lapidary Shop, 2941 N. 65th St., Lincoln, Nebr., sent in some loose, grayish horn coral fossils that averaged ¾x2 inches in size.

"These fossils are from the Pennsylvania System, Pawnee group, from Queen Hill shale, Queen Hill quarry near Murray (Cass Co.), Nebr."—on label.

NEVADA — "Epidote xls abound on Lone Mountain immediately northeast of Carson City (Ormsby Co.), Nev."—note sent in by A/2c Lawrence E. Wright, 55 PMS, Box 119, Forbes AFB, Kansas. Mr. Wright's home is in Carson City, Nev.

NEW HAMPSHIRE — The following item, dated Nov. 4, 1957, was sent in by Gunnar Bjareby, 147 Worthington St., Boston 15, Mass.

"This summer I visited the Nancy Mines in North Groton (Grafton Co.), N.H., for the first time. A prolonged shower made it impossible to do any serious work at this locality. My two companions and I merely hurried from one dump to another to see the extent of the workings. However, I noticed a bluish specimen and took it along. At home I found it to be graftonite associated with vivianite. Some of the graftonite has altered to a grey, dull and apatite-like pseudomorphic replacement of the original graftonite. There is a striking similarity to the graftonite found at the not-so-distant Rice Mine. In both localities the material is fresh and interlaminated with triphylite. Other collectors have found the Nancy No. 2 Mine graftonite associated with a dark greyish-green dickinsonite. Incidentally, the Italian repossite from Olgiasca, Lake Como, is graftonite and looks exactly like the Rice and Nancy Mines specimens. Crystals of graftonite are very rare; nearly all have come from the Rice Mine and one is known from the Palermo Mine."

NEW JERSEY—An item dated June 21, 1957, was sent in by J. Norman Convery, RD, Far Hills, N.J.

"McGovernite is again being found at the Sterling Hill Zinc Mine, near Franklin (Sussex Co.), N.J. Has been very rare up until now. Of course I have no idea how much has been found."

The following letter, dated July 10, 1957, was received from A. B. Cramer, 97 Park St., Carbondale, Pa.

"It might be of interest to know that while I have seen many lists of Franklin, N.J., fluorescents, none ever listed tour-

maline. Yet, practically all of the tourmaline from Franklin does fluoresce. I have seven specimens here in my collection running from the size of a dime up to a 'giant' which is 2¾" long by 1½" wide (this certainly must be a record for Franklin).

"Also, once in a while, associated with corundum, you will notice that the mica will fluoresce a pale yellow. This last, from Sterling Hill.

"Well, here are two new fluorescents for the collectors to look for."

NEW MEXICO—"This letter will be a list of mineral specimen locations that I visited on my recent vacation and I will send under separate cover a specimen of each item for your World News on Mineral Occurrences."—letter dated Aug. 22, 1957, from Zelma H. Wright, Jr., 3105 Dundalk Ave., Baltimore 22, Md.

No. 1—Pecos Valley "diamonds." Small colorless to brownish quartz xls in massive white gypsum. Found east of the Pecos River at Roswell (Chaves Co.), N. Mexico.

No. 2 – Apache Tears. Transparent to jet black obsidian pebbles. Plentiful on desert road south of Las Cruces (Dona Ana Co.), N. Mex. Found also five miles west on road out of Mesilla (in same county). Plenty of agates at this point.

(*Continued under Texas*)

NEW YORK—In the Jan.-Feb., 1957, R&M, p. 18, appeared an item relative to the finding of some nice selenite xls by Geo. E. Heusser, 4 Spring St., Ellenville, N.Y.

Ray Conover, Box 133, Stone Ridge, N.Y., sent us an interesting letter commenting on the occurrence but due to the huge amount of mail arriving every day, the letter got mislaid and completely overlooked until we ran across it as this issue was being prepared for the printers. (Please pardon us, Ray. We are very sorry—Ed.)

Here is Mr. Conover's letter, dated Feb. 25, 1957:

"Saw the notice about the selenite near Ellenville (Ulster Co.), N.Y.

"Geo. Heusser paid me a visit last year and gave me a few of the xls.

"The place is located at Kerhonkson on U.S. 209 right across from Kopps Garage. At the high clay hill. Odd thing about this is that Fred Schmeltz and I were there some years ago and found nothing but the clay. The highway dept had just had a shovel in the bank and dug back the hill some feet, as it had a habit of slumping out to the concrete. Is it possible that the xls have developed since then? In the short space of 25 years more or less? Also we have been having a trend towards less moisture over these years with a joint change in the water table."

———

"Tiny rock xls, doubly terminated (some do not have prisms and so resemble Herkimer County type); two contain tiny, slender striated tourmaline xls that may be dark brown but look black.

""These xls were found in December, 1956, in the Inwood dolomitic limestone, about two blocks west of the Marble Hill R.R. Sta., in New York City, N.Y. The xls were soaked in Hcl acid to remove the limestone." – note received from the finder, Bill Samland, 255 New Jersey Ave., Uniondale, L.I., N.Y.

NORTH CAROLINA – "For what it may be worth, the owners of the hiddenite mine (at Hiddenite, Alexander Co., N.C.) have opened the fields behind the pit for any who care to come and prospect, at $3.00 per day."–item, dated Oct. 28, 1957, from R. S. Mills, Box 1542, Salisbury, N.C.

———

Bradley Johnson, Box 726, Journal Sq. Sta., Jersey City 6, N.J., whose home is in the world-famous Spruce Pine area of western North Carolina (world-famous, mineralogically), has sent us a note on the area. The famous old emerald mines on Crabtree Mt. (Mitchell Co., N.C.), the only locality in the U.S. where ex-

The Great Salt Plains near Cherokee, Alfalfa Co., Okla.—members of the Oklahoma Mineral & Gem Society are digging selenite xls. The standing figure is Ned Kennedy

tensive mining for emerald xls has been conducted, and which have been abandoned for years, are to be reopened. We hope to have more information on the mines in the next issue.

NORTH DAKOTA – Brick clay has been dug at Halls Spurr (Bottineau Co.), N.D.

OHIO–Pinkish quartzite pebbles have been found in the drift near Cleveland (Cuyahoga Co.), Ohio.

OKLAHOMA–In the May-June, 1957, R&M, p. 246, appeared a short item relative to a salt plain near Cherokee (Alfalfa Co.), Okla. The salt plain covers 30,000 acres but ⅓ of it is covered by water at times. We have another and longer item about this locality and it was sent in by Marie Kennedy, 737 West Kansas, Blackwell, Okla., as per her letter dated Sept. 21, 1957.

"I'm enclosing a couple of pictures of members of the Oklahoma Mineral and Gem Society digging selenite xls in the Great Salt Plains near Cherokee, Okla. The pictures were taken this spring when we made a field trip, right after a rain. It looks like we are in a lake but it was just surface water and soon

Close-up view of Members of the Oklahoma Mineral & Gem Society digging selenite xls in the Great Salt Plains near Cherokee, Alfalfa Co., Okla.

soaked down. Before we left the sun came out and dried the surface and it was soon encrusted with salt, and white as snow, as far as the eye could see.

"In the May-June, 1957, issue of R&M on p. 246, you printed an item about the Salt Plains that is a little misleading. The Plains consist of a red brown sand and it is heavily impregnated with the salt. The salt shows only on the surface –just a thin crust.

"The selenite xls grow in the sand and it takes water to wash the sand off. We dig holes and use the splash system. We collected some nice single, doubly terminated xls. They are unusual because they have an hour-glass inclusion in the crystal. We found some nice clusters too– the crystals stick up from the center like quills on a porcupine. The xls are blade-like and brown in color."

A small but beautiful brownish selenite xl from the locality showing an hour-glass inclusion was enclosed with Mrs. Kennedy's letter.

OREGON – Nice specimens of native gold have been found in the gold mines around Baker (Baker Co.), Ore.

PENNSYLVANIA–Deep blue to purple cubes of fluorite have been found on Leinbach's Hill, five miles northwest of Reading (Berks Co.), Pa.

RHODE ISLAND–Roy McCrory, 203 W. Little Creek Rd., Norfolk, Va., reports finding black graphite in milky quartz on Charlestown Beach, Charlestown (Washington Co.), R.I. Mr. McCrory formerly lived in E. Greenwich, R.I.

SOUTH CAROLINA – A deposit of soapstone occurs north of Norris Station (Pickens Co.), S.C.

SOUTH DAKOTA–The following letter, dated July 7, 1957, comes from John P. Connor, Armour, S.D.

"Recently Mr. Arlington Lantz, of Armour, S.D., gave me two specimens of what we think are marcasite. He found them on the south side of the Missouri River while fishing about a mile below the Fort Randall Dam (at Pickstown, Charles Mix Co., S.D.). Although the color looks like marcasite the crystals are shaped more like siderite; one of these is enclosed."

The three-inch dark bronzy, circular, flat specimen is a rare form of marcasite known as a "marcasite sun." The mineral is in crystals whose edges only are showing, and these edges do resemble those of siderite. Unfortunately, the specimen is not lustrous (like a sun should be) but it might be if it were cleaned and spruced up a bit.

TENNESSEE – Black seams of asphaltum have been found in limestone at Perrys (Hickman Co.), Tenn.

TEXAS – In this issue, Zelma H. Wright of Baltimore, Md., describes some minerals collected on his recent vacation (see New Mexico). This is a continuation.

No. 3 – "Selenite. Large sheets of selenite, translucent and nearly colorless, can be found plentifully on highway road cuts between Alpine and the Big Bend Park, both in Brewster Co., Texas, on Highway 118. Agate was found at almost every stop that we made along this route."

UTAH – A recent letter from C. K. Henning, Pegram, Idaho, reads:

"Near Escalante (Garfield Co., Utah) I recently found some very colorful agatized wood–very large pieces similar to the material from Petrified Forest, Arizona. This sure makes beautiful cabochons and is extremely hard. This area is close to the highway and only a short side trip for anyone visiting Bryce Canyon or Zion National Park and there is plenty for everyone."

VERMONT–Milton E. Ailes, Box 36, West Danville, Vt., has sent in a nice orthoclase specimen (gray mass) that he had found in Norton (Essex Co.), Vt.

VIRGINIA – Allison Cusick, R.D. 1, Unionport, Ohio, has done considerable collecting in Virginia. He sent us one of his finds–a very fine deep greenish cleavable mass of gem quality amazonstone whose locality is the Rutherford mine near Amelia Court House (Amelia Co.), Va. This pegmatite mine is famous for its amazonstones.

WASHINGTON – "I am mailing you two fossils and a map showing locality where I found them. As I am very new at this game, I have no idea of identification or if a collector would be interested.

"The locality is on a county road about two miles east of Neah Bay (Clallam Co.), Wash. The road is very crooked where I found the fossils–the rocks along the road appear to be fossil-bearing for four miles or more. I found also queer, hard nobby rocks resembling prehistoric weapons or implements but think they were formed by nature.

"This area is on the northwest tip of Clallam County–about four miles west of Neah Bay is Cape Flattery, the most western portion of land in the U.S.

"We camped on Indian land near Cape Flattery for two days to fish for salmon. The fishing was good.

"There is so much of interest here and in two days you cannot begin to explore it. I did get out on Cape Flattery and to the 'hole in the wall,' rain forest, huge trees – you feel that time had turned back and there would surely pop out from behind a tree a redskin or a freebooter. I picked up one small and well-polished pebble of nice jasper, so somewhere under all that cover there must be more.

"This whole area, including the fossil locality, is in the State of Washington, on the Olympic Peninsula."–letter dated Aug. 12, 1957, from Mrs. Inez O. Rogers, Box 184, Oakridge, Ore.

The fossils are small white clamshells in a dark gray shaly rock.

Thank you for the map, Mrs. Rogers. We are very glad to get it. We wish collectors in general would be as thoughtful as you. Maps are very helpful for spotting localities.

WEST VIRGINIA – Brown limonite has been mined in Berkeley County, south of Martinsburg, W. Va.

WISCONSIN – In the March-April, 1955, R&M, P. 150, mention was made of some nice agates being found by John Krogstad, Pepin, Wisc., in the gravel beds in and around Pepin (Pepin Co.), Wisc. A letter, dated July 17, 1957, from Mr. Krogstad reads:

"While we are still hunting agates (Lake Superior agates) in and around Pepin, they are not near as plentiful as they were a few years ago. Reason–more and more collectors are picking them up. Choice seleced pieces never have been plentiful. A large collection of such specimens would make any collector more than pleased to own. No two specimens are alike. With us it is a hobby–first for our own enjoyment and second to show them to others who like to see beautiful rocks. I am 78 years old but can usually pick as many as the younger ones."

WYOMING – Yellow native sulphur occurs as small xls and incrustrations about the fumaroles of geysers in the Yellowstone National Park, Wyo.

AUSTRALIA–A subscriber in Queensland, Australia, who wishes to remain anonymous sent us the following letter, dated Aug. 25, 1957:

"I left Lightning Ridge, N.S.W. (famous opal locality in Australia), last April and arrived in Hughenden, Queens. after a weary 10-day train journey, covering 2,000 miles. A few weeks after I left the Ridge my partner was murdered there by a homicidal maniac. A total stranger, for no reason whatever, simply walked up to my partner, shoved the muzzle against his stomach and pulled the trigger. Poor Tim (my partner) lingered two days in agony. If this had happened 40 years ago the murderer would have been lynched immediately.

The murderer's excuse was, he was drunk, 'I didn't remember anything about it.' The brute got off lightly, only four years.

"The only news from the Ridge is—a miner found a very fine black opal valued at £1000. Most of the miners on the Ridge are doing other work—on the ranches, carpentry, etc. Work is lots easier than opal mining and the wages far more attractive, too.

"Most of the interior of Queensland has had no rain for six months and everything is parched up and dry. Animals (domestic and wild) are dying. Needless to say, the Flinders River, flowing through Hughenden, is dry and we have to depend on the artesian bores for our water.

"There are many Americans around Hughenden working on the gold, silver, tin and uranium deposits. There are also a few rockhounds here—all nationalities, American, German, English, Russian, etc.—who spend most of their time on the bed of the sandy river, often finding good stones of topaz, garnet, quartz, etc.

"North of Hughenden there are plenty of minerals—gold, silver, tin, uranium, etc.—also gems, such as diamonds, sapphires, aquamarines, zircon, etc. Needless to say, there the conditions are the same as on the Ridge.

"Hughenden is a boom town—plenty of work and high wages."

CANADA—"While on a fishing expedition with a friend at Brompton Lake, near Orford, Que., Canada, we noted some greenish xls in the rocks near the shore. Sending you three pieces, two in calcite and one with gray diopside. Can you please identify these for us?"—letter dated Sept. 5, 1957, from Fred J. Tupper, Franklin, Vt.

In all cases the emerald-green drusy xls are uvarovites (chrome garnet) — coating gray diopside (pyroxene) xls or white cleavable calcite.

ENGLAND — The following letter, dated July 28, 1957, comes from Lt. W. L. Hiss, 94 Green Lane, Padgate, Warrington, Lancashire, England. (Lt. Hiss is an American stationed in England.) He describes some collecting experiences in England and Wales.

"I've had a good time since moving to England last summer. I'll be here until January, when I return to the land of the big PX and the non-folding nickel. Can't say that I enjoy this industrial part with all the smog and people but the rural areas are very beautiful.

"Have done a little bit of collecting but all the dumps are well picked over and there aren't too many active mines now. When you go out to some of the localities mentioned in the literature you get the feeling that you are perhaps the three thousandth person to tramp over the same area, if you get what I mean.

"I have been down to the celestite mines at Yate, near Bristol, where they are open-cast mining the ore from the Keuper Marl. I didn't find much of good keeping quality but it's certainly there if you hit the right days. Celestite is hard to keep unless you can get the thicker crystals since the cleavage is so perfect.

"Visited the Caldbeck Fells with the kind invitation of a collector in Penrith and managed to find a good selection of the minerals from that locality. Surprising to find campylite, pyromorphite, mimetite, duftite, etc., after all these years.

"Have had the honor of visiting a retired doctor of chemistry who lives in North Wales and has the finest collection that I have seen. I've spent a total of three days with him and have yet to see his entire collection. Also, I've gone collecting with him to an old mine on the extreme tip of the Lleyn Penn. in North Wales. An old manganese mine was worked there doing World War II but not much to be had there now.

"Found quite a bit of massive fluorescent fluorite on the dumps at one ancient mine in the Alston, Cumberland, area but it takes some hard digging to produce any crystalled minerals.

"Another locality that I have visited

is the Settlingstones Mine, Fourstones, Northumberland. I ended up visiting an old Roman camp with the mine manager and three other geologists instead of going underground but picked up some barite on the dumps before I left. This mine produces quite a bit of xline witherite.

"Pat and Bob Barker stopped by on their way back to the States after three years in Norfolk. Glad to meet them after many exchanges with them.

"Be glad to meet anyone that comes through this part of England and help them as much as I can."

IRAQ—Kenneth Fisher, 147 Fairlamb Ave., Havertown, Pa., sends in the following letter, dated May 23, 1957.

"I received my first letter from Bill Weigelt, Jr., G.O.R.A., P.O. Box 278, Baghdad, Iraq. He and his wife have been busy settling into their new mode of life. They live in a home, 'American influenced design — Iraqui engineered.' He says his immediate area is ideal, for an archeologist. Here is his first mineralogical report."

The following item sent in by Bill Weigelt:

"Near Lake Habbaniya, 84 kilometers west of Baghdad, we made our first finds. Shell limestone phosphoresces pale green (short wave). Pebbles of jasperoid breccia, chert, quartz and serpentine. Some of the pebbles are covered with crusts, resembling tufa, however, I believe the crusts are aragonite as they phosphoresce pale green, briefly, SW. The pebbles were deposited in the bed of an ancient stream.

"The promising mineral localities are to the north, about 350 miles distant, near Turkey, where the region is mountainous. We plan to visit this area as much as possible. I have seen Herkimer-type quartz xls and was overjoyed, but at the time no one could interpret for us. We are slowly learning Arabic."

JORDAN—One of our good subscribers, L. O. MacMurdy, now stationed in the Philippines, was formerly stationed in Lebanon, from which country and neighboring countries he sent us a large boxful of minerals and sands. From Jordan we have the following—all pebbles: Dark gray chalcedony, flat milky quartz, dark gray almost black moss agate, dark gray petrified wood, black bituminous limestone, gray-dark gray to brownish limestone, gray to brownish fossiliferous limestone.

"All the above pebbles came from the Dead Sea, north shore, in Jordan."—on label.

LEBANON — From Deir Al Quamar (Deir El Kammar) in southern Lebanon, we have two calcite specimens that were collected for us by L. O. MacMurdy (see Jordan). One is a grayish, xled mass. All faces of xls (rhombohedrons) are weathered and many stained red by iron. Some xls fl. yellow under long wave.

The other is a banded, gray calcite (stained red by iron) and it also fl. yellow under long wave.

MOROCCO — From Souk El Arba, Morocco, we have a specimen of syenite that was sent us by John F. Jedlicka, 3536 E. Fairmount Ave., Baltimore 24, Md. (he was stationed in Morocco). The specimen is a gray xline mass, one face polished, and consists of green epidote, black magnetite, and chocolate-brown titanite (sphene).

"To distinguish it from the usual syenite, it was given the name, epi-syenite, by the French geologist, Alfred Lacroix."—on label (epi, no doubt, refers to its abundant epidote).

See "Collecting at Souk El Arba, Morocco," by John F. Jedlicka, Sept.-Oct., 1957, R&M, pp. 464-465.

SCOTLAND — From the lead mines at Strontian, Argyleshire, Scotland, we have a nice specimen consisting of whitish harmotome xls, colorless barite xls, and grayish calcite xls (fl. pale red under short wave). The specimen was sent in by Sandy Ramsay, 1015 Aikenhead

Rd., Kings Park, Glasgow S4, Scotland.

"One of the harmotome specimens picked up on the Bellsgrove dump at Strontian, Argylshire, Scotland.

"Most of the specimens are badly weathered but we didn't have time to really get right into the dump for the fresher material."—on label.

See "Collecting in Scotland," by Sandy Ramsay, in this issue.

SPAIN — Juan Montal, Plaza Sgdo, Corazon 1, Villafranca del Panades, Spain, sent in a dark gray coarse xline calcite whose locality is Papiol, Barcelona Province, Spain. Under the short wave the calcite fl. a bright brownish-red.

SYRIA — From a mica mine in northwestern Syria, we have a selenite specimen that had been collected for us by L. O. MacMurdy (see Jordan in this issue). The specimen consists of small colorless selenite plates, many of which are encrusted by gray earthy calcite.

INTERESTING DISCOVERY

by S. J. SQUIRES, F.G.A.A., 61 Hawthorne Road, Galloway's Hill, Brisbane, N.E. 1, Queens, Australia

For the past six years, a five and a half inch singly terminated quartz crystal, completely covered by an opaque encrustation, has been lying on my desk. I obtained it from a friend when on a visit to Alice Springs. The crystal came from the Harts Range of Central Australia.

For years I have intended to polish a prism face to see what was behind the veil—gem quality, or perhaps interesting inclusions. However, I never managed to get round to the job till about a fortnight ago.

Selecting the most suitable face, I ground off the covering and made a progress inspection through the still unpolished surface. To my delightful amazement, I saw a moving bubble. It seemed incredible that such luck should come my way.

Every collector has a keen desire to *see*, let alone *possess* such a remarkable manifestation of Nature. A queer feeling comes over one as he looks through the window into the past—one, five or ten million years. Your guess is as good as any.

Of course, inclusions of both liquid and gas, of microscopic size are very common. Here is one, however, that can be seen across the room.

The cavity in my specimen is flattish and lies parallel to a prism face. It extends two whole inches from the base of the pyramid along the C Axis. When the crystal is moved, the bubble moves from end to end in a zig-zag fashion, the cavity's greatest width being about half an inch. I estimate the quantity of liquid (water?) to be about 2 c.cs.

The crystal also has many interesting needle-like solid inclusions—not yet determined.

I would be pleased to hear from any other fortunate possessor of such a curiosity, giving details of their prize.

From limited inquiries and from reading, I believe that a crystal having such a lengthy cavity is a great rarity. Perhaps I am wrong. I should like to know.

Your Father

Who's the stranger, Mother dear?
Look, he knows us. Ain't he queer?
Hush, my child, don't talk so wild.
He's your father, dearest child.
He's my father? No such thing.
Father died way back last spring.
Father didn't die, you dub;
Father joined a mineral club.
But now the season's closed, so he
Has no place to go, you see.
No place left to roam,
That's why he has come back home.
Kiss him—he won't bite, my child
All those rockhounds look so wild.

—Fred Allen
Lincolnton, N. C.

THE SAND COLLECTOR

CONDUCTED BY PETER ZODAC
PEEKSKILL, N.Y.

Lake sand from Lake Tahoe, Calif.

From the south end of Lake Tahoe, on the line between California and Nevada but in El Dorado Co., Calif., we have a sand sample that was sent in by an anonymous subscriber, The sample is a coarse, brown sand consisting chiefly of quartz (chiefly brown, some whitish) with a little black magnetite. Most of the magnetite is imbedded in quartz.

River sand from Vicksburg, Miss.

Some few months ago we received the following sample from an anonymous subscriber. It is a very fine grained, gray sand consisting of quartz (colorless, smoky, brown) with some greenish epidote, black magnetite, and silvery muscovite and gray clay.

"Mississippi River sand, taken at water line, 1000 feet from the bridge, east side of river, Vicksburg (Warren Co.), Miss."

Ilmenite sand from Banner Co., Nebr.

This is a fine grained, black sand consisting chiefly of lustrous, black ilmenite, with smaller amounts of black, lustrous magnetite and a much smaller amount of pinkish garnet.

"This sample was obtained from a dry wash in Banner County, Nebr. There was a streak of this black sand on top of the ordinary lighter sand.

"There is only one town in Banner County which is Harrisburg (pop. 67) and there are no roads from Harrisburg to this particular part of the county. The closest town to this sand location would be Dix, which is in Kimball County. Perhaps it would be easier to pinpoint it as 'southeastern Banner County.'"—note on label of sand that was sent in by Mrs. Robert Cook, Callaway, Nebr.

Lake sand from Lake George, N. Y.

From the extreme southern end of Lake George, in the village of Lake George, Warren Co., N. Y., we have a sand sample which the conductor of this department collected personally. The locality is at the north end of Shepherd Park (small one) in about the center of the village and its small beach is about 100 feet long. An old resident remarked that the sand at the water's edge (which was collected) was natural—the sand further back may have been brought in. The village is a popular summer resort; the sample was collected on Sat., July 13, 1957.

The sample is a fine grained, gray sand consisting chiefly of quartz (colorless, smoky) with small amounts of gray feldspar, pink to dark red garnet, and much smaller amounts of black magnetite, silvery muscovite, and green epidite.

Quartz sand from Sand Springs, Okla.

This is a medium grained, brown sand consisting almost entirely of quartz (chiefly brown, some colorless, also smoky) with a tiny amount of lustrous black magnetite.

"From Hiway 64, about 10 miles N/W Sand Springs (Tulsa Co.), Okla."—on label of sand that was sent in by Glen E. Kiser, Douglass, Kans.

Lake sand from Lake Poinsett, S. D.

Lake Poinsett is a small lake in S/E Hamlin County in eastern South Dakota. From the lake we have a sand sample that was sent us by Mrs. Ed. P. Olson, Beresford, S. D. It is a medium grained, gray sand consisting chiefly of quartz (colorless, brownish, red carnelian) with some brown limonite and a tiny amount of black magnetite.

"From Lake Poinsett, near Arlington, S. D."—on label.

Quartz sand from Maiden Rock, Wisc.

"Am sending you today some sand that is being mined at Maiden Rock (Pierce Co., Wisc.), near here and carloads are being shipped to the oil fields everyday, in Texas, etc."—letter dated Aug. 8, 1957, from John M. Krogstad, Pepin, Wisc.

The sample is a medium grained, brown sand consisting entirely of brownish quartz, translucent and nicely rounded.

Gold sand from Cooper's Landing, Alaska

Gerry and Will Shulman, 47 Falcon Rd., Livingston, N. J., collected this sand sample for us when they toured Alaska in 1955 (see their article, Hunting the R&M subscriber in Alaska, R&M, March-April 1957, pp. 115-123.

The sample is a fine grained, lustrous black sand. It consists chiefly of lustrous black magnetite, some lustrous black ilmenite, colorless zircon that fl. orange, and platy native gold.

"From Stetson Creek, near Cooper's Landing, Alaska."—on label.

Beach sand from Kep, Cambodia

"The bottle marked 'A' contains sand from Kep, Kampot Province, Cambodia (10° 15' N. Lat.—104° 20' E. Long.). Kep is on the Gulf of Siam and is Cambodia's only presently accessible natural beach."—letter dated April 8, 1957, from Lt. Col., William A. Lucas, Office of the Army Attache, Navy 150 (Box C), F.P.O., San Francisco, Calf.

This is a medium grained, brown sand. It consists chiefly of quartz (brownish, smoky, colorless, brownish chalcedony, brownish jasper) with a small amount of brown limonite and a very tiny amount of black magnetite.

River sand from Champagne, France

M/Sgt. Edward Biondi and Mrs. Biondi (1141st (USAF) SPACTRON, APO 183, New York, N. Y.), sent in this sample which is a medium grained, gray sand consisting chiefly of gray chalcedony with minor amounts of colorless to smoky quartz, black magnetite, and silvery muscovite.

"Sand from the Seine River at Champagne, France, April 1956. Scene of historic crossing of Gen. Geo. S. Patton in World War II."—on label.

Shell sand from Molokai, Hawaii

"Under separate cover I am sending you some samples of sand. These were picked up by me in a trip to the Hawaiian Islands in 1956, and then again two samples a few weeks ago.

"Perhaps the most unusual to obtain is the one from the leper colony on the island of Molokai. This is from the beach of the original settlement where Father Damien (his story is a most interesting one, they are trying to have him 'Blessed' and eventually a Saint). Its claim to being unusual is in that to obtain a Territorial Health Department permission to go to the Isle is difficult. They say an average of no more than 175 of these permits are granted annually. My wife and I were most fortunate, it is in her opinion, and we have covered most of the world more than once, the most beautiful natural setting in the world.

"Maps are included to let you see exactly where the samples were obtained."—letter dated Sept. 7, 1957, from Paul O. Drury, P. O. Box 1028, Las Vegas, Nevada.

The sample is a fine grained, cream colored sand. The sand consists chiefly of sea shells (cream colored, white, pinkish) with very small amounts of dull black magnetite, and light green to dark green olivine. Some of the shells fl. pale yellow under long wave.

The sample comes from Kalaupapa Beach on the north coast of Molokai.

Beach sand from Kaiteriteri Beach, New Zealand

Kaiteriteri Beach, on Tasman Bay, is between Motueka and Takaka, on the north shore of South Island, New Zealand. From the beach we have a sand sample that was collected by Miss Winifred H. Arnold, 2020 Magnolia Ave., Long Beach, Calif.

The sample is a medium grained, brown sand consisting of equal proportions of quartz (smoky, colorless, brownish) and sea shells (brown, some white and some blue).

"This is a beautiful golden sand beach about four miles off the main road between Motueka and Takaka. It is a very safe bathing beach, and there are a few buildings there and a picnic area. A sign on the beach said, 'Do not remove any sand or shells from this beach.' It is called the 'Golden Sand' beach and it does look very golden when wet."—on label.

Musical sands of Eigg Island, Scotland

Eigg (or Egg), an island of the Inner Hebrides, 12 miles off the west coast of Inverness-shire, Scotland (to which county and country it belongs), and 8 miles s.w. of Point of Sleat on the large island of Skye, is about 6 miles long and 3 miles wide. The island terminates on the south in the Scuir of Eigg—a most conspicuous object for miles around—a mass of basaltic rock over 1200 feet high (its upper 470 feet is a mass of pitchstone).

In the northern part of the island is a small bay (Camas Bay) and here on the beach is found a remarkable sand which when walked upon gives off a musical sound. We have a sand sample from this locality that was sent us by Sandy Ramsay, 1015 Aikenhead Rod., Kings Park, Glasgow S4, Scotland.

The sample is a fine grained, gray sand. It consists chiefly of colorless quartz. Many sea shell fragments (white, dark gray, brownish) also present some of which fl. red under long wave. A few grains of green epidote also seen. No musical properties could be detected, perhaps the sample was too small to detect it.

"Eigg—name is derived either from Scottish or Irish Gaelic and means a knick or cleft. One such runs in a S.E. direction across this island from Laig Bay.

"Musical sand. Irregularly shaped, even graded, quartz grains (mean diameter 0.3 mm). The sand appears to act as a vibrating fluid in that the grains act independently but their vibrations synchronize. If a plunger fitted with piezo-electric plates is thrust into the sand during part of each oscillation all of the pressure of the plunger is immediately lost on entering the sand, while at other periods of oscillation the pressure may build up to twice the mean pressure. This change of pressure varies in a perfect sine curve and therefore the sand is proved to be acting as a fluid.

"The sand vibrates at between 800 and 1200 vibrations per second.

"The simplest test is to stab a container of sand with a pencil, the note being emitted immediately the pencil starts to penetrate the sand. Care must be taken that the container is not a natural resonator, or the sand will adjust its tone to that of the container.

"This phenomenon is closely linked with that of the Booming Sands of desert dunes.

"Only other locality known in Great Britain is in North Wales.

"Just discovered another fact about Eigg's 'Musical Sand'—it disappears in winter (due to winter storms and gales), but come summer, it is back at the old stance giving selections from 'Tannhauser' "— notes attached to the sample. Sandy sent in the following references.

1—Carus-Wilson, Cecil—Musical Sand. Bournemouth Society of Natural Sciences (Poole), 1888. 12 mo. pp. 20.

2—Carus-Wilson, Cecil—The Production of Musical Notes from Non-musical Sands. Nature. (London) 1891. Vol. XLIV, pp. 322-323.

3—MacIver, A.—Musical Sands. Temple Bar (London), 1895. Vol. CVI, pp. 79-85.

4—Goodchild, Trans. Edin. Geol. So. (1897), Vol. VII.

5–Miller, H.–Cruise of the Betsey, pp. 58-67 (1858)–first reference.

6–Bagnold, R. A.–The Physics of Blown Sand and Desert Dunes. Methuen (London) 1941.

The above are all English references–the following is an American:

Goodenough, Glenn H.–Musical Sand: A Review of the Literature. R&M, Sept.-Oct. 1949, pp. 451-454.

River sand from Basutoland, So. Africa

F. C. M. Bawden, P.O. Box 1167, and Mrs. I. N. Gush, P. O. Box 1128, both of Johannesburg, South Africa, sent in this sample.

The sample is a very fine grained, dark gray sand. It consists chiefly of quartz (smoky, brownish, colorless, some red chalcedony), gray clay, and a tiny amount of black magnetite.

"River sand from the Caledon River, between Maseru and Teyateyaneng, Basutoland, South Africa."–on label.

Diamond sand from South West Africa

Some few months ago we received this sample from John S. Albanese, P. O. Box 221, Union, N. J. It was the first diamond bearing sand we ever received.

The sample is a medium grained, black sand. It consists chiefly of dull black ilmenite, lustrous black magnetite (some are xls), garnet (pink and gemmy to dark red and opaque), green gemmy epidote (some opaque), colorless to smoky quartz (also gray to red chalcedony), and a few colorless diamonds.

"From Oranjemund (mouth of the Orange River), South West Africa.

"Very difficult to obtain due to strict security regulations."–on label.

Lake sand from Faido, Switzerland

A subscriber in Switzerland who wishes to remain anonymous sent in this sample which is a medium grained, dark gray sand. It consists of quartz (chiefly colorless, also smoky, brownish), whitish feldspar, black biotite, silvery muscovite, and a tiny amount of black magnetite.

"From the Ticino River, near Faido, Ticino Canton, Switzerland."–on label.

A province in Switzerland is known as a canton or kanton.

Beach sand from Port Davey, Tasmania

There are a number of islands and even countries of the earth from which we never saw a sand sample but every now and then a sample arrives from one of the "unknowns" and we are only too glad to describe it in R&M. Here we describe our first and only sand sample from Tasmania which arrived on Sept. 14, 1957. It was sent us by Clyde Clayton, P. O., Hythe, Tasmania.

The sample is a very fine grained, gray sand. It consists of colorless quartz with some sea shells (gray, brownish, whitish, bluish).

"Sand from the North Shore of Bond Bay, Port Davey, Tasmania."–on label.

Bond Bay indents the southwestern coast of the island of Tasmania.

We haven't a single subscriber nor even a correspondent on Tasmania and yet we were able to contact Mr. Clayton with very satisfactory results. The method was easy. The Editor of R&M has a friend, Mr. Clayton E. Clayton, of New York, N. Y., and in one of his letters Mr. Clayton happened to mention a nephew way off in Tasmania. The Editor got the name and address of the nephew, wrote him, in due time a sand sample arrived.

MINERAL NOTES ITEM

Submitted by Capt. George W. Owens
The Amateur Lapidary

The El Paso International Museum has recently added the Colonel E. M. Barron collection of Southwestern and Mexican Minerals to its already outstanding mineral display. In addition, Colonel Barron is granting the Museum a $250,000 collection of gems to further the importance of the Museum. The gems will be displayed in a new wing being built especially for this purpose. These valuable grants give the El Paso Museum one of the finest mineral and gem displays in this country. Colonel Barron is best known to our readers as the President of the Southern Gem Mining Company, whose advertisements regularly appear in R&M. The Colonel is to be congratulated on his splendid gift which undoubtedly will do much to increase interest in our hobby. When in El Paso be sure to visit the Museum and call on the Colonel, whose address is 5241 Montoya Road, Upper Valley, El Paso, Texas.

WOMEN'S CORNER OF R&M

Conducted by Winnie Bourne
c/o Rocks and Minerals
Box 29, Peekskill, N. Y.

Letter From A Collector

It is believed that in publishing this letter many of us will better realize what collecting means. The letter was written by Mrs. Mapes of California and sent to E. E. Joachim of Atlanta, Georgia, who was so impressed that he secured permission to have it published. Without further comment, here is the letter:

"Dear Jo:

"It's been a long time since I've written—guess I haven't had much to say. Our 13-year-old keeps me hopping.

"Yesterday I went on a big adventure! I wish you could have joined our party. Our boy, his wife, and I went on a jade hunt down in Jade Cove, Calif. George [the lady's husband] had a formal portrait sitting and couldn't go and our teenager stayed home to baby sit the granddaughter.

"We left here at six and reached the high meadows at eight-thirty. It took 25 minutes to "claw" down the cliff to the jade beach. It is so early in the season that the trail is still badly battered from the winter's damage. Some of the toeholds had disappeared and that decomposed serpentine is pretty crumbly in spots. Naturally we were carrying the "lazy man's burden" so as to make only one trip down. The sea was like glass from the top of the cliff and our imaginations were conjuring up all the rare jades freshly washed into the cove by the winter storms. The bright green and blue-green grasses which lay just under the surface of the water cause an effect to bring out goose bumps on even a non-collector when seen from the cliff, some 200 feet or so up over Jade Cove. The name alone tickles one's imagination gears.

"For about two hours we dug, scratched, pushed, pulled, scrambled and bled in our silent effort to do a week's collecting in an hour. I doubt very much whether that Cove has been invaded this season prior to our visit. The grass and weeds were all smoothed out from the water line to the base of the cliff in the smooth carpet fashion that only the sea can lay. It takes a bit of nerve to plunge your bare hands down through all the seaweeds, kelp, teentsy little pink crabs, bugs, etc., that squirm and slime around; even when you know that you will probably touch solid crystal clear nephrite on the bottom! It takes a few minutes to put aside your qualms and get started in earnest.

"We gathered about ten pounds and got some fine pieces. All beach pebbles —(no sledge hammers for me)—and in several colors. The very clearest, translucent pieces are *very small* but choice.

"George had said to keep anything as large as your tiny fingernail and up. Several pieces intrigued me, even though I knew they were not jade, so I gathered them also. One piece of light grey-green jade weighs a bit over two pounds. That was the largest.

"Jimmey [the son] got a four-pound steelhead (fish) about 20 abalone, a small eel and a sunburn on his back. Mary Jr. [the daughter-in-law] got about three pounds of jade, some little crabs (too small to cook), a chance to read a new magazine from cover to cover without interruption and a pink nose.

"After lunch and a lazy quart of coffee while draped in a 'Mrs. Astor' pose on some conveniently shaped rocks, Junior and I explored the next cove south. We found some nice pieces there and a possible lens newly exposed. Not having

a hammer or the necessary knowledge to make any decisions, we studied it from every angle and tried to take a mental picture away with us for comparison.

"After lunch, a party of four men joined us in Jade Cove and promptly put crow bars and chisels to work. One man seemed to be the 'boss' and was quite idle so I 'moseyed' on over and made myself known. He was very sweet –about 60-65, and father of one of the other three. He is a long-time member of the San Louis Obispo society, so, I figured he would know jade from junk. He looked over a few representative rocks from my sack and was surprised at the quality I was finding.

"We saw lots of fishermen and hikers with their little packs on their backs and their glassy-eyed gaze toward far horizons. Early in the morning, on the way down, we saw a small school of young whales playing and sprouting water like a bunch of little boys with new water-pistols.

"A day on the open coast is full of excitement and there are so many things to enjoy over and over again in the dull weeks of hundrum life to follow.

"We arrived home about 6:30, tired and dirty, but very proud of the day's collection.

"Today I'm moaning and groaning. I never knew I had so many soft muscles and places to ache! The infra-red lamp didn't help at all. I do hope I haven't bored you, Jo. I do a bit of rambling when I write–and it did save me from an hour's ironing this evening. My conscience tells me to iron but my muscles are telling me to 'Drop dead'. George is writing, so I'll close.

Love,
Mary"

[All I can say after reading this is that I wish I could have been along.
–Winnie]

COLLECTING IN SCOTLAND IN 1957

By Sandy Ramsay
1015 Aikenhead Road, Kings's Park, Glasgow, S.4., Scotland

Sadly I thread a dollar's worth of new ribbon into my typewriter, sadly I report the worst holiday for collecting and bad weather that I have endured for a long, long time . . . the heavens gloomed melancholiously when we left Glasgow for Oban, however, by the time that we had passed Loch Lomond and mounted the hillside above the old "Rest and Be Thankful" road, the skies cleared, the sun shone and our hearts were uplifted by the joy of living. Gloom descended again upon us after sampling a so-called lunch and alleged cup of coffee at Lochgilphead.

Oban saw us much cheerier and we loaded a few cans of beer on board for the "souses," and arrived at our lodgings in Taynuilt at the house of an old flame of mine. The next day (Sunday) we filled the car with the household and sandwiches and set off on a long run through some really beautiful country. We took the main road along Loch Etive, Loch Awe and then steered to a secondary road along the river Orchy to Bridge of Orchy, through the desolate Rannoch Moor, down Glencoe to Kinlochleven, where we picnicked outside the town. We visited several quarries on the way to Fort William but with no luck. Returning home, we cut out a long stretch of the journey by taking the ferry over to Ballachulish where we visited the slate quarry. Here it is almost impossible to cut a slate without finding pyrite xls in it, there must be millions in the quarry but they are very small, rarely being half in inch in size. Having, as usual, no tools with us, I took several chunks of slate so that I might remove the pyrite xls at my leisure, however we

were unable to get down to the quarry where the pink metamorphic marble is found. Home by way of Appin and the Benderloch but we found nothing of interest in the granitic quarries by the roadside.

North of the house where we were staying, just across Loch Etive, we could see the raw gap in the hillside that marks the Bonawe quarries . . . we crossed in the ferry, but the workers being on holiday we were unable to contact any knowledgeable person there so we hunted around. Alec Galt, my pal (he always finds the biggest and fustest of specimens) came up with a piece of granite that was covered with tiny xls of chalcopyrite, but apart from the various granites we found nothing else . . . these granites are polished and much used as ornamental stones.

Another day we went to the island of Mull to see the Highland games at Tobermory, a most picturesque spectacle, but it made me tired to see husky highlanders tossing a fir tree (caber) about the landscape, but my heart gladdened at the sight of the kilted dancers, especially the female ones. Just off Tobermory lies the treasure galleon of the Spanish Armada, we saw its position, but so far no appreciable amount of treasure has been found because of the amount of silt on top of the ship . . .the hull of the ship has been reached but the tunnel, cut through the mud, collapsed. Also near Tobermory lies the interesting mineral tobermorite, more commonly known as crestmorite. We were unable to get along to Bloody Bay to search for it.

The next day we jostled along to Ballachulish ferry and crossed Loch Linnhe to Ardgour. The robber barons in the Highlands are still alive, it cost us a whole dollar for car and party of four to get over on this ferry. We crossed over the peninsula to Strontian on the single track road, and had lunch at the hotel there. Here I lost the wee brass magnifying glass that Eddie Brant gave me when we started off on this hobby. I asked Bill Davidson to look for it when he is up in September. Outside Strontian the road branches and we took the left fork, which proved to be the wrong one, however we got oriented at last by a friendly highlander with full directions, but the caution "The road goes to the bottom of the hill, but don't take it, it don't go nowhere."

The first dump we came to, from the Bellsgrove mine, yielded us most specimens, mostly harmotome, but with a little brewsterite and much badly worn calcite which is fluorescent, some of it fluorescening crimson under the short wave, but dull not bright like the Franklin, N.J., calcite. A lot of the harmotome was lost because it was adhering to rotten calcite which disintegrated with a slight tap of the hammer. We ascended the hill, saw the Whitesmith dumps up on the hill to the left but the hill was too steep for me to climb, and the others became too interested in the huge crevasses and abandoned mine shafts about the place to bother with collecting. The minerals we got here were harmotome in fine xls, brewsterite, a little massive strontianite, weather-worn xls of galena and occasionally a pyrite xl. All the minerals, including the calcite, are very dirty and require lots of cleaning.

At all the places of interest I was unable to collect sand because (1) it was non-existent (a good reason, this), (2) because of the weather conditions. I was very sorry I couldn't get any from below the only bridge that spans the Atlantic or from Tobermory, that might have had some Spanish pieces of eight in it. All I saw at Tobermory was a dinghy full of seagulls looking like a lot of corpulent Glasgow baillies (aldermen). They were at least more considerate than a black-winged gull in Oban harbour, with a blacker heart, that scored a bullseye on my bald spot . . . thank goodness the cows don't fly in that spot.

We moved up to Inverness and then wended our way down Loch Garve, here near the north end of the loch just by the roadside is a big boulder of smoky quartz with almandine garnets and small books of mica. Whilst Alec Galt searched

the hillside to try and locate the source of this, Ernie Stollery and I tried to make mayhem out of that chunk of pure cussedness, it positively leered at us and refused to give up its goodies . . . a cyclist came along and proved to be much more efficient with hammer and chisel than our puny selves. We showed him some Franklin fluorescents and he said that he had seen my show in Perth museum. The lynx-eyed Alex failed to find the source of the garnets but his hefty hammerings gave us some specimens. These were the only garnets found by us in Invernessshire, though the county is reputedly "full" of garnets.

We kept on down to Loch Maree, visited the tropical gardens at Inverewe, down the terrible single track road of Gruinard hill and passed the night at Dundonnell hotel. Next day we went to Ullapool but the sand there was too gravelly to pick up so we made up for Inverness again, we came to Strathpeffer, a real garnet locality according to Ernie, all we had to do was open the collecting bags, light a cigarette, tap the rocks with a hammer and the car axle would be bent about a couple of feet by the weight of the garnets all anxious to grace our collections . . . but verb. sap. I stayed in the car reading a "Whodunnit" as they set off up the hill. Aye, Ernie had dunnit again, nary a garnet. I don't know what Charlie Knowlton will say to me about this, no garnets for Fullerton, Cal.

Dumping Ernie in Inverness we beetled down to Fort William in pouring rain, the place was crowded so we set off for Mallaig as I knew the Editor of R&M was keen on some of the "silver sands" of Morar. This is a single track winding up and down the mountains and Alec tried to average 40 miles per hour; all he managed to do was nearly turn the hair I haven't got white. We didn't stay long in Mallaig but I learned that the road there is so bad that many English tourists, not accustomed to the single track mountain roads, have their cars shipped back in preference to driving back over that road again. We put up at Lochailort hotel (ochone, three bucks for bed and breakfast). Got a good tip from a roadman near there, a locality where sheets of mica were to be found . . . however the rain kept up all night and the next morning one couldn't climb the mountain in chest high bracken that was dripping with rain, so no mica.

Back to Oban and the next day we made the trip to Staffa and Iona, all the time the heavens wept and so did we, and when we got out of the Sound of Lorne, the Atlantic billows nearly increased our flow of tears. The ship slowed down as we passed the island of Staffa and we could see, very mistily, Fingals Cave with its basaltic columns. On approaching Iona we were met by small boats to take us ashore and some of the passengers on board were too scared by the bobbin' boats to try and go ashore. In the sixth century, St. Columba was sent from Ireland to bring back the erring Scots Christians under the aegis of the Church of Rome again and he selected this spot for his monastery. The cathedral which had fallen into ruins is being restored, so in the pelting rain we walked up to the church to see how the work was progressing. Here in ancient times the island was considered to be a very holy place and the ancient Scottish kings were buried here.

All the Oban jewellers' shops feature jewellery cut fron Iona pebbles, this I think is not real agate but a green silicified serpentine, but looks exceptionally nice. Cigarette boxes and other trinkets are cut from a verde antique found on the island, but as the locality is on the other side of the island there wasn't sufficient time to visit it, hence no specimens. I did pick up a piece of the red coloured rock that was ferried across from the neighbouring island of Mull to build the cathedral, also I took a handful of wet sand for the Editor of R&M.

Rain and frustration followed us all the rest of the trip, despite the fact that this has been a most pleasant summer with little or no rain before our vacation or since then, we became so fed up that we returned to Glasgow a day early.

THE AMATEUR LAPIDARY

Conducted by Captain George W. Owens

Hq. Sq. 384th Bombardment Wing, Little Rock Air Force Base, Jacksonville, Arkansas

Amateur and professional lapidaries are cordially invited to submit contributions and so make this department of interest to all

GARNETS

The garnet group is a very interesting one and worthy of considerable study by everyone interested in gems. Composition of garnet varies greatly but may be simply stated as $R_3\ M_2\ (SiO_4)_3$, R standing for either ferrous iron, manganese, magnesium, or calcium, with M meaning chromium, aluminum, or ferric iron. As a rule several of these metals are present.

Not all garnets are suitable as gems due to color or imperfections. They are found throughout the world, sometimes in association with other gems. They are found in many types of formations, metamorphosed limestone, rhyolite, mica and hornblende schists, gneisses, or pegmatites and the usual gem-gravels. Here is one gem that can occur any place from your own back yard to far-off Tasmania.

There are many varieties of garnet, blending into one another according to the amounts and types of metals present.

For strictly gem garnet we are only concerned with six types. To better list tables and to understand the family it is best to divide these six types into two classes, the red and purple, and the violet, green, brown, yellow and orange colors. Group A will consist of pyrope, almandite, and rhodolite. Group B of andradite, grossularite, and spessartite.

Group A—
Physical and Optical Characteristics:

	Pyrope	*Almandite*	*Rhodolite*
Hardness	7¼	7½	7¼
Streak	white	white	white
Acid	All attacked by acids		
Heat	Ordinary blowpipe fuses		
Luster	Greasy to vitreous		
Refraction	1.72-1.75	1.77-1.81	1.76
Specific gravity	3.5-3.8	3.8-4.2	3.84
Dispersion	.025	.026	.026
Toughness	Excellent	Excellent	Excellent
Cleavage	Poor	Poor	Poor
Fracture	Uneven	Uneven	Uneven

Group B—
Physical and Optical Characteristics:

	Andradite	*Grossularite*	*Spessartite*
Hardness	6½	7¼	7¼
Streak	white	white	white
Acid	All attacked by acids		
Heat	Ordinary blowpipe fuses		
Luster	Adamantine	Greasy	Greasy to vitreous
Refraction	1.85-1.89	1.73-1.76	1.79-1.82
Specific gravity	3.84	3.61	4.15
Dispersion	0.57	.028	.027
Toughness	Excellent	Excellent	Excellent
Cleavage	Poor	Poor	Poor
Fracture	Uneven	Uneven	Uneven

Colors

Pyrope—Intense red. Also in hues of orangey-red and orange-red, fading into a brownish-red.

Almandite—Dark red to reddish-purple. Orange-brown to brownish-red.

Rhodolite—Purple hues. (The name "rhodolite" was first applied to a type of garnet found in North Carolina but now stones of strikingly similar characteristics and color are found in Ceylon and elsewhere.)

Andradite—Yellowish-green to green (demantoid). Yellow—extremely rare in even the smallest possible size for gems. Black—Now and then used as a type of mourning jewelry.

Grossularite—Green to yellow to white red/orange to red/brown.

Spessartite—Orange red to orange brown. While this type is not an important commercial gem stone, it is usually found in amateur hands and some are of exceedingly fine beauty.

Fashioning: All garnets are subject to the standard cutting methods used by all of us. They make excellent faceted gems and lovely cabochons. The garnet, when the color is too deep, has also been processed into a "hollowed cabo-

chon," meaning that the back or reverse side of the stone has been ground out and the depression polished. This tends to lighten the tone of the deep color. Quite a few of the European cuts of the past century were processed in this manner and it is not uncommon to see such cabochons in present-day collections. These hollow cabochons as well as standard-cut cabs of red garnet are known as "carbuncles." Some of these possess great beauty and are most valuable. Extra fine qualities are becoming scarce. The find of star garnet in Idaho several years ago has enhanced many collections. For those of you not fortunate enough to have seen any of these splendid specimens it may be possible to trade "Barney" Braun a suitable mineral specimen and thereby obtain one of these large garnets. Barney's address is: CWO Vernon R. Braun, Headquarters 4061st Refueling Wing, Malmstrom Air Force Base, Montana. He is a well-known collector and has a wonderful mineral collection. Be sure to write him before you send a specimen.

The red tones of garnet are those most generally seen in collections; yet the most beautiful of all, the rhodolite, is seldom seen. Naturally, it is the rare one of the red group. It has been found in North Carolina, in Ceylon, and has been reported from one of the islands off the coast of Labrador. When properly cut, the fine purplish-red is exquisite. The author has one nice, but small, rhodolite in his collection that was obtained from Mr. E. E. Joachim of 1710 Inverness Ave. NE, Atlanta, Georgia, some years ago. "Jo" has some splendid stones in his collection and a considerable number of duplicates which he will trade or sell at most reasonable prices. A line to him may get you the one garnet you need to round out the collection.

Gem rough in fine grades of any of the garnet family is hard to locate. The extremely dark reds from India seem to be plentiful but most of this material is not suitable for faceting. Unless you locate an old collection it is doubtful if you ever locate any rhodolite rough, yet some fine facet grade pieces are found in North Carolina right along. The author once obtained a nice piece of about four carats by following standard gold panning procedures and locating a seam in the bed of Cowee Creek. Time was limited and only a few pans could be worked. The one piece of rhodolite was the only interesting thing recovered. The possibility exists that more could be obtained in this manner, especially during the summer months when the stream is low.

The evidently unlimited supply of inferior grade garnets has harmed the status of gem garnet. A knowledge and the appreciation of the splendid beauty of fine garnet would cause many of us to look more closely at any rough in hope that it could be one of the true gems. A fine gem garnet is a splendid addition to any collection. We have all seen Bohemian garnets (almandites) in jewelry stores, but how many of us possess one? Admittedly, these are "cheap" garnets, but even they are attractive in a proper setting. How much more attractive then would be a fine andradite of the same size? The andradite, or demantoid, is found in hues of green that rival some of the finest of emeralds, while demantoid displays a brilliant fire never seen in even the very best of emerald. Demantoid is softer than quartz but fashions into a lovely gem. Quality stones of fine green are hard to find in any size above ½ carat but the International Import Co., of Atlanta, Ga., may supply a few. This new company has solid connections in the gem centers of the world and is constantly adding rare items to their already large stock. Mr. George Bruce has an extensive collection of his own and would be pleased to receive any request for help in locating rare items.

I have three small demantoids and am presently searching for a piece of rough, but have little hope of getting it. It is a strange fact that the black melanite variety of garnet so common in the States is also of andradite variety, but we have yet to find any facet grade demantoid here—or, is some rock hound holding out?

The grossularite variety of garnet is generally cut as cabochons and is some-

times sold in commercial circles as jade. The green variety often contains inclusions of some black substance. The white grossularite makes a nice and unusual cabochon. A spectacular type of white to pinkish garnet occurs in large rhombic dodecahedron type of crystals. (My collection contains one of over five pounds), and is found in Mexico. Unfortunately these crystals contain large amounts of inclusions in the form of sand and are not suitable for cutting.

The spessartite variety gives us the beautiful brown to orange tones. While the vast majority of these stones have flaws, no collection would be complete without at least one representative of this colorful branch of the garnet family. The author was most fortunate in obtaining a packet of these from an old collection and can now say that he has all the various hues (including quite a few duplicates) of this variety. The really fine cinnamon colors that are comparatively flaw-free are hard to find and make a welcome addition to any general collection. These stones are most suitable for any type of jewelry. One large urn or ikon was seen early this year while in England that was handsomely studded with these garnets. It was a superb piece of craftsmanship and only its price precluded it being added to my collection. The artistic use of the orange and brown stones greatly enhanced the beauty of the silversmithing.

Garnet in all its many colors is an important member of the gem family and should be better represented in our collections. Why don't you have a spessartite in your collection?

For those fortunate enough to possess facet grade rough in any variety, the following faceting method has always resulted in a lively gem for the author:

Main Crown Angle: 39 degrees
Main Pavillion Angle: 39 degrees

A double zircon cut preferred but the standard brilliant also gives pleasing results for all round stones. In emerald cuts the author prefers to add at least one extra row of facets to both top and bottom of the stone. This seems to enhance the beauty. With the exception of demantoid and spessartite the oval cuts are not considered to show the garnet family to good advantage and are seldom used by me.

Garnet responds readily to the standard methods of faceting and no special techniques are involved in preparing the stone for polishing. Linde A on tin gives a fine polish in a minimum of time. Normal amounts of heat are not considered a problem, nor have any "grain" problems been noted. An exceedingly high polish is possible using diamond with a hard lap. This method does generate more heat than the Linde A and is slower in "taking" but the results are well worth the added effort. On extremely large stones the table does give some problems as it tends to "wear away" in uneven patches. Perhaps it would be more appropriate to say it polishes in some areas before it will polish in others. Under a 10-power glass it can be seen that a certain amount of uneven spots are present. A light regrinding on 800 or 1200 bort may be indicated. Turning the dop and polishing from another direction usually corrects this trouble. Slowing down the lap speed and using less pressure may also help. In the event the table continues to give trouble regrind it with the 800 or 1200 grit bort and polish it on your cabochon unit just like you would polish a cab. The rounding of the edges of the table will be cut away when you make your crown cuts and so presents no problem.

A fine faceted garnet that you have cut yourself will be a fine addition to your collection and if you do not have all the varieties, why not start now to complete the garnet family?

Garnet responds to the standard preforming and polishing methods used by all of us in cutting cabochons. Cerium oxide on lucite is used with excellent success to obtain a most satisfactory polish. Garnet cabochons are usually good show pieces and should be in every collection. For those having star rough the orientation of the star is most important. Most asteriated stones from the Latah County, Idaho, location come in fairly large to very large sizes. These are read-

ily oriented by rough grinding into a round ball shape. Dipping this in kerosene and placing it over a small nail hole in the bottom of an inverted tin can that you have placed over a 75 or 100-watt bulb will immediately show you the proper orientation. A small X-mark made with a pencil is sufficient to mark the center of the star. If the rough sphere is large enough, simply saw it into halves and you will have two star stones. If it is a small stone, grind the bottom part away. Keep the X at the top center of the stone and you retain proper orientation. Most star stones will respond to this method of determining orientation.

Owing to the variation in composition, garnet may have wide variations in both RI, SG and coloring, but is not difficult to separate from other gems or synthetics. Most commercial "doublets" have garnet crowns. Glass imitations are readily detected by the lack of hardness. Incidentally, the demantoid has multiple hair-like inclusions which separate it from all other materials. To determine grossularite from either nephrite or jadeite, the RI and SG of the garnet is the higher.

All in all the garnet group is of definite interest and does make both excellent mineral specimens and cut stones. Every collector should have at least one stone of each of the garnets and no collection would be considered complete without such a set.

I have some small but choice hessonites, etc., and will share with those lacking this stone. The beautiful orange-brown color makes it an ideal stone for silversmiths and it shows their workmanship to excellent advantage. Please do not stop at the conclusion of this article, but rather get out your reference books and refresh your memory about garnets. They are worth the small effort required.

FRANK DUNCAN FUND

In the Sept.-Oct. and Nov.-Dec. issues of ROCKS AND MINERALS there appeared articles relating to Frank Duncan Fund. However as the articles implied that any monies collected were to be a gift to Mr. Duncan the thought occurred that a note in this issue should be made of certain circumstances which since the last issue have arisen.

ROCKS AND MINERALS is in receipt of a letter from Mr. Duncan wherein he states that he is badly in need of some money but prefers it to come to him as a loan, rather than an outright gift. ROCKS AND MINERALS feel that in this regard his wishes should be respected and therefore all monies collected will be sent to him as a loan, a loan, however, which probably no contributor would be inclined to press payment.

(*Continued on page* 48)

Frank Duncan Fund

International Import Co., (George Bruce)	$ 5.00
Rocks and Minerals	10.00
Women's Corner of R&M (Winnie Bourne)	5.00
John S. Albanese, Union, N. J.	10.00
Gem and Rock Shop, Jackson, Miss.	2.00
Donald Presher, Montrose, N. Y.	2.00
Edna D. Doughty, Westfield, N. J.	10.00
Ken Fowler, Bayard, Nebr.	2.00
Calvert Bastress, Amityville, N. Y.	25.00
Glen Royal, Jamaica, N. Y.	3.00
Fred Hayden, Jamaica, N. Y.	5.00
Bethora Comstock, Smithville Flats, N. Y.	2.50
Frank Waskey, Oakville, Wash.	5.00
Arden Meek, Tulsa, Okla.	10.00
G. H. Sherrill, Watertown, S. D.	3.00
Minerals & Gems, Albany, N. Y.	2.00
Gene Schenet, San Clemente, Calif.	10.00
Violet Miller, Brooklyn, N. Y.	5.00
R. V. Hollingsworth, Midland, Texas	5.00
D. Apple, Cambridge, Mass.	3.00
A. L. Jarvis, Modesto, Calif.	2.00
Arnette Reissig, Upper Montclair, N. J.	2.00
Arthur Dasher, Melvindale, Mich.	2.00
Earl Calvert, San Gabriel, Calif.	5.00
Anonymous	37.60
Total to date	$173.10

Club and Society Notes

Attention Secretaries—Please submit neat copies. Give dates and places of meetings. Check names for correct spelling.

East

Eastern Federation of Mineralogical and Lapidary Societies

L. J. Pursifull of the Gem and Mineral Society of the Virginia Peninsula was elected President of the Eastern Federation of Mineralogical and Lapidary Societies at their annual meeting on August 30, 1957, at Old Point Comfort, Virginia.

J. C. McClure of the Miami Gem and Mineral Society was elected Vice-President, Sam Brown of the Newark Lapidary Society is Treasurer and Mrs. Elsie Kane White of the Gem Cutters Guild of Baltimore will serve a second term as Secretary.

Robert R. Williams, Jr., of the Southern Appalachian Mineral Society, host club for 1958 Convention and Show, is Executive Vice-President and General Chairman. Robert A. Campbell is co-chairman.

North Carolina—The Mineral Showcase of America—is the theme of the 1958 show, which will be held in the City Auditorium on August 7, 8, 9, 1958. Members are invited to plan their vacations in "Asheville —The Land of the Sky," with the Convention Committee planning field trips and guide service during the week or more following the convention, in that wonderful collecting area.

Mrs. Elsie Kane White, Secretary
Eastern Federation of Mineralogical
and Lapidary Societies
3418 Flannery Lane, Baltimore 7, Md.

Brooklyn Mineralogical Society

On September 19, 1957, the first Mineralogical Society for Brooklyn was born. The charter members (numbering 31) were recruited from a list of Brooklyn subscribers of ROCKS AND MINERALS sent by the Editor. Many members brought along their friends.

The meeting was called to order at 8 P.M. in the home of Dr. Harold Weiss at 8002 19th Avenue, Brooklyn, N.Y., and the floor was thrown open for discussion. The results of this discussion indicated that we had gathered together a variety of talents and interests ranging from young amateurs to seasoned veterans; from collectors of minerals and fossils to lapidarists and gem cutters — with everyone eager to share knowledge, information and guidance with everyone else.

The opinion was widely held that the great borough deserved to have its own Mineralogical Society.

At this first meeting we named our society "THE BROOKLYN MINERALOGICAL SOCIETY" and initiated a Constitution to encompass the wide range of interests represented here. It was decided to meet on the third Thursday of each month in the premises above described. Following the initiation of the Constitution, an agenda was set up for the next regular meeting and a field trip was organized to one of the trap quarries of New Jersey.

It was decided to bring back enough material for every member whenever possible. The results of these field trips will be reported to "R&M" as soon as possible, as it is intended that "R&M" shall become the official publication of this Society. This matter will be taken up at a later meeting.

Upon completion of the regular business of this meeting, the members examined specimens, exchanged ideas and it was quite apparent that all members are very happy to be present at the formative meeting of what will soon be the best Mineralogical Society in the State.

The second meeting took place on Thursday, October 17, 1957. The following officers were nominated and elected: President, Harold Weiss, M.D.; Vice President, Einar Whalen; Secretary, Evelyn Glantz Hershoff; Corresponding Secretary, Nils G. Stark; Treasurer, Jacques A. Kurtz.

The Constitution was given a second reading and dues were set at $5.00 per annum, with junior members (ages 13-18) accepted without voting privileges for 50 cents per annum.

We are please to record that Mr. Curt Segeler, immediate past president of the New York Mineralogical Society, honored us with his presence and addressed the members of our Society and gave us many

valuable suggestions based on his wide experiences with organizations of this type. He expressed an intention to join with us at our next meeting.

Following the regular business of the Society, Mr. Einar Whalen gave a very interesting talk on the New Jersey Zeolites illustrated by many beautiful specimens from his extensive collection.

Following this, there was a grab bag of specimens collected on the previous field trip to northern New Jersey, a feature which we intend to perpetuate. A second field trip was organized to the Franklin, New Jersey, area.

Meetings are held on the third Thursday of each month at the home of Dr. Harold Weiss, 8002 19th Ave., Brooklyn, N.Y., at 8:00 P.M. Visitors are always welcome.

Queens Mineral Society

Meeting started at 8:14 P.M., Allen Green presiding. The minutes were read and accepted.

Committee Reports: Pete Revere, in the absence of Dave Hammer, reported that the Field Trip Committee organized an impromptu trip to Roxbury, Conn. Collecting was enjoyed by 14. Considerable quantities of siderite, sphalerite, pyrite, quartz crystals in siderite and some galena were collected. A sojourn to Roxbury Falls, Conn., produced a few fine garnets and at Judd's Bridge Road, some staurolites.

Program Committee: Lou Roth reported that at the next meeting Mr. Robert Gensheimer would speak on the "Romance of Tungsten."

Membership Committee: Hazel Robertson reported three candidates. The society then voted in Frank Tuohey, Calvert Bastress and Helen Bastress.

There was some discussion concerning a club field trip either to Ellenville or Wurtsboro but it was then left to the Field Trip Committee to decide the place and date.

Lou Roth then reported that the next Annual Convention of the Eastern Federation would be held in Asheville, N.C., August 7 to 9 inclusive, 1958. It was reported that, at this time, the members were unable to state with any certainty whether the society would exhibit or how many club members would attend. It was also reported that during the month of October the Boy Scouts of America had sponsored a program in Geology for Scouts and Scouters as well as Explorers. Unfortunately, the secretary had learned belatedly about this program and it was too late to render any effectual help, but it is hoped that in the future the Society would give all possible aid to the Boy Scouts. The secretary then briefly read the important highlights of the Annual Meeting of the Eastern Federation. Lou Roth then praised the Federation for its wonderful monthly bulletin. He particularly liked the series by James H. Benn entitled "Mineral Localities of the United States." He removes various articles from the Bulletin and turns these excerpts over to such members or Committee Chairmen who are interested in any particular topic. For example, the series by Mr. Benn is turned over intact to the Chairman of the Field Trip Committee, Indian Lore to Vic Tuohey, Lapidary articles to Pete Revere, etc. Thus everyone interested in a particular subject gets the full benefit of the Bulletin.

A recess was called at 8:50 P.M. The meeting resumed at 9:20 P.M., at which time it was turned over to the Program Committee. Allen Green, an authority on Uranium Minerals, spoke at length on the many specimens that he had brought down. Among them were Samarskite with Columbite, Lambertite, Gummite, Carnotite, Pitchblende, Monazite, Ellsworthite, Torbernite, Fergusonite, Uxenite, Autunite, Uranophane, Ampangabeite, Uranocircite and Thorianite. Others shown were Meta-Torbernite and Zippeite.

A short question and answer period followed during which time Ted Fredericks and G. Hahs spoke on interesting topics including "Atomic Energy."

The meeting was duly adjourned at 10:10 P.M. (Oct. 24, 1957)

Louis H. Roth
Queens Mineral Society, Sect.
114-67 223rd Street,
Cambria Heights 11, L.I., N.Y.
LA 5-1380

Westchester Mineral and Gem Society, Inc.

The Westchester Mineral and Gem Society, Inc., opened its 1957-58 season with a business meeting at the County Center, White Plains, New York, on September 19th.

Forty members and guests of the club went on a very enjoyable and successful field trip to Ellenville, New York, on October 13th, to collect quartz crystals. Ted Schoen made the arrangements, and the club was the guest of George Heusser of Ellenville. The group also collected pyritohedron crystals. A visit was also made to a

clay bank at Wawarsing to collect selenite crystals.

The October 17th meeting at the County Center featured a film and a talk by Dr. David Miller, a member of the staff of Philips Electronics Corp. of Mount Vernon, New York, featuring the use of X-ray in the identification of minerals.

Kenneth A. Watts,
Publicity chairman
27 LeCount Place,
New Rochelle, N. Y.

Capitol District Rock and Mineral Club

The Capitol District Rock and Mineral Club, following a summer recess, assembled in the Mineral Room of the New York State Museum, Albany, New York, on September 5, 7:30 p.m. to initiate the first meeting of the Fall-Winter season. As previously agreed, club meetings shall continue to be held at 7:30 p.m. on the first Thursday of each month. (NOTE, exception Jan. 9 instead of Jan. 2).

It is interesting to note the Capitol District Club is a new advent . . . or adventure. Organized in the Fall of 1956, the response to date illustrated the long acknowledged need for an organization dedicated to the serious collector, be he (or she) a novice or the advanced collector. From a nucleus; a mere handful of enthusiasts this past Fall, the club membership has expanded in all directions until present membership numbers approximately 140. Interest principally centers around Rocks, Minerals and the Lapidary, with allied, associated interest a matter of personal individual taste. Undoubtedly, as evidenced by the magnanimous response received the organization is to play an important role in the collectors mineralogical life above and beyond producing an increasing number of 'rock widows.'

During the Summer recess, collective field trips were conducted once a month under the skillful guidance of Ken Carr, Field Trip Chairman and Jerry Lapham, President. It is a definite credit to both Jerry Lapham and Ken Carr that field trips were so tremendously successful; heavily attended and excellently variable in collectable minerals including some of the following famous localities: Montgomery County N.Y; Tilly Foster Mine, Brewster, N.Y.; Chester, Vt.; Franklin, N.J.; Chandlers Mills, N.H.; Strickland Quarry, Portland, Conn.; and the bountiful and fabulous two day field trip: the Gouverneur, N.Y. area. During these frequent field trips, at meetings and in between these occasions the club membership evidentally has adopted a motto which sounds like some variation of "What is it", and it is most significant that advanced, Senior members have given so freely of their time, knowledge and experience in explanation and identification of mineral specimens.

During the September 5th meeting Elmer Rowley, Program chairman, reported on a tentative schedule of speakers for the winter meetings. Each speaker is a recognized authority in the mineralogical field which should be of particular interest to all mineral fanciers. Elmer Rowley incidentally conducts a class on Mineralogy at the Glens Falls High School on Wednesday evenings at 7:30 p.m. under the auspices of Glens Falls Adult Education.

In keeping with the purpose and principles of the Capitol District Rock and Mineral Club, Jerry Lapham, President and the entire membership extend a cordial and sincere permanent invitation to interested individuals or other clubs to attend club meetings. Time: 7:30 p.m. Date: 1st Thursday of the Month. Place: Mineral Room, N.Y. State Museum, Albany, N.Y. When: Whenever you have the occasion. Why: Because, this organization always appreciates your company.

Further, any parties interested in correspondence, whether for the exchange of ideas or specimens, are welcomed to contact this author, assured all information shall be properly and promptly publicized to club membership.

Again recall, member or non-member, your presence is always welcomed at all meetings of the Capitol District Rock and Mineral Club.

Daniel C. Libeg
Director of Public Relations
Capitol District Rock & Mineral Club
67 Middle Street
Ballston Spa, New York

Fulton County Mineral Club

October 21, 1957:

Bill Chagnis reported on the trip to Schoharie October 20th for strontianite.

Lewis Valachovic reported on an exhibit of Sterling and Franklin minerals to be held in Franklin, New Jersey, October 26 and 27.

A trip to unexplored territory for Herkimer "Diamonds" will be made November 3rd. Members will meet at the DeLuxe Diner at 12:30.

Ethel Kennedy was the speaker of the

evening. She told about a trip she and her husband took recently across the Desert, which included such sites as Death Valley, Salton Sea, Death Valley Scotty's home, and the 20-Mule Team Borax area. She and Will displayed beautiful and interesting minerals collected and purchased including obsidian, geodes, and an onyx known as "marble cake."

November 4, 1957:

Phil. Siarkowsik reported on the trip for Herkimer "Diamonds" taken November 3rd.

Lewis Valachovic passed around a dendritic mineral found in Franklin, New Jersey. at the Buckwheat Dumps.

The next speaker on November 18th will be Lewis Valachovic, who will tell about his recent trip to Franklin, New Jersey, and display specimens collected there.

The speaker December 2nd will be Andrew Palmer, who will have as his topic "Chemical Elements in Relation to Rocks and Minerals"—a scientific approach.

Reverend Walter O'Grady was the guest speaker—his subject was "Hobbies."

There is a possibility of the members going to a Syracuse salt mine this season.

Catherine Streeter,
Reporter.
368 Bleecker St.,
Gloversville, N. Y.

Mineralogical Society of Pennsylvania

One hundred and thirty-two members and guests of the Mineralogical Society of Penn., took advantage of the ideal weather and made the trip to the Kibblehouse Quarry at Perkiomenville, Penn., for their October Field Trip. In spite of the fact that the usual abundance of specimens was lacking, everyone seemed to have a good time.

The presence of the Bauhof family, who have been among the missing lately, due to prolonged illness in the family, gave the President, Charles Belz, a chance to present them with a plaque for their outstanding service to the M.S.P. For years they edited the Newsletter and guided all the M.S.P. field trips.

We were also honored by the presence of two famous personages, Dr. Edgar Wherry and Dr. Wilhem F. Bock.

Dr. Edgar Wherry is a noted Scientist and Author on Botany and Mineralogy and is currently working on the relationship of Plant life to Mineral Deposits.

Dr. Wilhem F. Bock is a Research Associate at the Academy of Natural Science in Philadelphia and Chairman of the M.S.P. Paleontology Committee.

Our thanks to a gracious host for permission to collect in his ever popular quarry.

By Wilford A. Beveridge
Publicity Committee
832 Main Street,
Bethlehem, Penn.

Enclosed is a group shot of the M.S.P. taken on this field trip.

Photography credit goes to Mr. Harold Evans.

Photo by Harold Evans

Mineralogical Society of Pennsylvania
October, 1957, field trip to Kibblehouse Quarry, Perkiomenville, Penn.

Franklin Mineralogical Association

On October 29th, 1957, the Franklin Mineralogical Association came into existence. The Association is unique in the sense that its purposes are to be concerned first and foremost with the minerals of one mining district, that of Franklin and Sterling Hill, Sussex County, New Jersey.

The formation of such a specialized society has come about as the result of the increasing and continued interest in the minerals from this district. A number of other reasons have also prompted the formation of the Association.

The Association knows of no group or publication which currently promotes the broadcasting and disseminating of information about the Franklin and Sterling Hill minerals for the benefit of the beginner and amateur collector.

Since mining operations officially ceased on the deposit at Franklin, interest in the Buckwheat dumps has become greatly accelerated. Since no publication deals with the minerals from the Buckwheat dumps, one primary project of the Association is to issue at least once and possibly twice a year, a publication entitled *Franklin Mineral Digest*. As several members pointed out, interest in the famous Geological Survey Professional Paper 180, "The Minerals of Franklin and Sterling Hill, Sussex County, New Jersey" by Charles Palache, 1935 might readily justify printing parts of the report for the benefit of association members.

As several members have also pointed out, the Palache report was based upon mineral specimens that were collected from the mines. Only a handful of minerals described by Palache and earlier geologists came from the dumps of the district. Also, most of the mineral specimens described by Palache and others were found in some of the earliest and oldest collections, as well as some of the most complete and most valuable. Collectors prowling the dumps today can only hope for a very modest imitation of these priceless collections without going to great personal expense.

Membership is open to all who are interested in minerals from the Franklin-Sterling Hill district. There is no age limitations. Membership fee is two dollars per year.

One of the purposes of the Association is to promote safety-mindedness among collectors on the Buckwheat dumps and to cooperate fully with the local authorities there in promoting any safety measures designed by borough officials.

Members of the association have voted to affiliate with the Rocks and Minerals Association.

Collectors desiring membership or further information should write:

Gerald Navratil.
Box 70, RFD 2,
Middleburg, New York

South

Southern Appalachian Mineral Society Holds Last Field Trip of Year

The Southern Appalachian Mineral Society held its last field trip of the 1957 season Sunday, October 20, at the famed Hiddenite Mine, Hiddenite, N.C. Although rather late in the season, more than 40 people were present. This site, closed to the public for more than 30 years and the only source of undisputed Hiddenite, now is open to mineral collectors.

Specimens found on the field trip included Hiddenite, reticulated rutile, rutilated quartz, quartz crystals (one 8 inches across), tourmaline and others.

Various committees of this large society now are busy on two important projects. First, the annual meeting of the Society in January, which will include a contest for best specimens found in the year, and at the same time, plans for the Eastern Federation of Mineral Societies which will meet in Asheville August 8-9-10, with this Society as host.

Initial committee reports indicate that this will be the most successful and best attended show in the history of the Eastern Federation. Dealer booths are more than half sold with the official solicitation of dealers yet to be made. Special exhibits by museums and individuals will include many never before publicly displayed. Full information concerning the show will be immediately supplied.

Fred M. Allen, Jr.
President
Box 501, Lincolnton, N.C.

Georgia Mineral Society

The annual dinner meeting of the Georgia Mineral Society was held October 14, in the ODK Banquet Hall, Georgia School of Technology, with Mrs. Nelson Severinghaus, president, presiding.

Reports by officers and committee chairmen showed that considerable progress had

been made during the year. There had been an increase in membership, attendance, and enthusiasm. The field trips were well planned and attendance was encouraging.

A film, "Land of the Cherokees," was an added attraction for the evening.

New officers installed for the coming year were: Prof. H. E. Cofer, of the Emory University geology staff, president; Mrs. Nelson Severinghaus, vice-president; Mr. S. P. Cronheim, treasurer; Miss Janie Morris, recording secretary; Dr. Lane Mitchell, historian; Dr. A. T. Navarre, museum curator; Miss Erna Mason, corresponding secretary.

At the November meeting, Prof. R. H. Rohrer, of Emory University, spoke on the subject of "Earth Satellites," and illustrated his talk with slides. He also demonstrated the movement of an earth satellite in a model he had constructed using a revolving desk globe with an artificial earth satellite moving in its orbit around the globe. Much interest was displayed in the discussion, and Professor Rohrer answered numerous questions at the conclusion of his lecture.

The Georgia group is looking forward to a variety of interesting and instructive programs and field trips under Professor Cofer's leadership.

Erna Mason
State Health Department
Atlanta 3, Ga.

Ohio

Hancock Geological Society

We would like you to know that we have had our election and our new officers are as follows:

President—Norman Decker
Vice-President—Don Ohl
Secretary—Mrs. Dorothy Nelson
Treasury—Miss Grace Kistler
Librarian—Elizabeth Winzeler

We would also like to tell you that we had a large display at the Hancock County Fair in September, which proved interesting to a great many people; who before thought very little of rocks and minerals. Rocks and the excitment of rock hunting can be like a disease; easy to catch and hard to get rid of. We now have a member who is teaching us the fundamentals of Geology and this has proved to be very beneficial to the members.

The first week in October, we went on a field trip in the Medusa Quarry, and even though it rained the entire day, there were a few of us that found some nice specimens of trilobites and other fossils.

It was there that we met some of the members of the Detroit Mineral Society, and I might add that they ended up pretty wet too. But a little water just doesn't seem to stop a Rockhound once he gets started at his work.

Our club; Hancock Geological Society, of Findlay, Ohio, is trying to find methods in which we can fatten up the club's treasury, so that we can buy equipment.

Mrs. Carole Huntley
Van Buren, Ohio

Wyoming

Cheyenne Mineral & Gem Society

Fifty-one members and guests of the Cheyenne Mineral & Gem Society attended our November meeting. The program was given by Mr. & Mrs. R. J. Laughlin.

Mrs. Laughlin's talk on "Coral, The Gem of the Mediterranean" was thoroughly enjoyed by all.

The seven seas cover the greater portion of the earth's surface. yet when searching for material for jewelry we seldom think of the ocean as a source for any gem other than pearls. However, there is another beautiful gem material in the sea—precious coral.

The early Romans suspended pieces of coral on a string around the necks of their children to protect them from dangerous influences. Even today in some parts of Italy coral in the form of jewelry is worn by some as a protection against the "evil eye."

In early day Persia, genuine coral was distinguished from imitation by its smell of sea water. Persians held the belief that Corallium Rubrum could not acquire its red color until it was removed from the sea. The Hindus & Chinese used coral to grace the statues of their gods.

Mr. Laughlin gave a working demonstration on the lapidary treatment of coral.

There was an exhibit of coral and a display of hand made jewelry set with oxblood red, gem, coral branches, designed and made by the Laughlins.

A door prize of gem coral was won by Mr. Leonard Edwards.

After the meeting refreshments were served.

Edward E. Kopsa
Corresponding Secty
1740 Andover Drive
Cheyenne, Wyo.

Arizona

Mineralogical Society of Arizona

A southwestern travelogue with kodachromes was presented at the Oct. 18, 1957, meeting of the Mineralogical Society of Arizona, by Moulton B. Smith. Flowering season at the North Rim of Grand Canyon included pink-blossomed New Mexico locust and mountain-meadow phlox. Spectacular scenes were shown in Capitol Reef and Arches national monuments, weird Goblin Gulch (all in Utah), mountains of Colorado, New Mexico's red mountains and canyons and White Sands national monument. Included in the kodachromes were numerous species of Arizona's wild flowers taken last spring after the first wet winter since 1952. The travelogue covered trips taken in 1957 by the Smiths.

Karan Kahn, junior member, gave a five-minute talk on andalusite, ilmenite, magnetite, chlorite and bornite.

Mr. Rockhound (Arthur L. Flagg), who has been in the hospital due to an injury, is slowly recovering. He is expected to go home today but his complete recovery will require time.

Milford Benham. chairman Phoenix Gem and Mineral Show, says show committees are all set up. Russell Trapnell reports queries already coming in, showing a marked interest in the combined show and Rocky Mountain convention. The show will again be sponsored by MSOA, Maricopa Lapidary Society, and AiResearch Lapidary Society. The three societies will be joint hosts of the convention. Watch for the dates early part of March.

November Arizona Highways carries another fine article by Arthur L. Flagg on thumbnails and micromounts, entitled "Petite Minerals." It is illustrated with a two-page spread of exquisite color photos of enlarged micromounts by Floyd R. Getsinger. Floyd also has a fine article in the same issue giving all the data on photographing micromounts. The magazine is a must for collectors. Their other spread was a fast sellout, so get your copy soon; at Arizona Highway Department, Phoenix.

Ida Smith, Cor. Secy.,
2238 East McDowell,
Phoenix, Arizona

Arizona State Fair Mineral Exhibit—1957

The most spectacular exhibit this year (1957) at Arizona State Fair Mineral Department was the large collection of gold nuggets of Al Stoval, many of them found embedded in logs in Stovall's Montana lumber camp. Some as large as English walnuts.

Vieing with the nuggets was a large case of manganese ores, one of the finest manganese exhibits in the nation, some with rare crystals. The case contains unusual pieces of manganite, psilomelane, rhodochrosite and pyrolusite. It is a permanent gift from Al Stovall Mining Company to the Mineral Museum.

Another unusual exhibit contained diamond crystals, one brilliant specimen a twin. These are all African diamonds in the natural state and are a permanent gift to the Museum from Roman Noseck, diamond drilling contractor of Oracle, Arizona.

Among the junior exhibits, Ajo Public Schools won all the awards: The Phelps-Dodge Trophy on cabinet specimens; the Arthur L. Flagg Trophy on miniatures, and the State Fair Commission, High Score Award.

Other exhibits were: The first synthetic mica made completely from American materials: aluminum, oxide, potash feldspar, magnesium, silica, and potassium silicafluoride. It is used in brake linings, plastics, welding rod coatings, high-temperature connectors, furnace windows, nuclear applications, etc.

A case of Arizona asbestos considered the finest in the world.

A fossil collection of Arizona prehistoric animals and birds, the personal collection of the late Guy E. Hazen. Hazen collected these over a period of many years, uncovering a little-known page in the history of Arizona's prehistoric animal life.

Charles R. Ashe's collection of 20-million-year-old fossil insects.

Texans take note: Fred Bitner displayed biggest bolo tie in world! It's made of rope, metal and Arizona petrified wood.

Kennecott Copper, Ray Mines Division, displayed the process from ore to copper; Phelps-Dodge, New Cornelia Branch, from Mine to Market, and University of Arizona Bureau of Mines exhibited a model hot water geyser.

Upstairs the metal and gem stone work, jewelry and thumbnails glittered more spectacularly than ever: A desk set, copper and chalcedony, Wilma Cowell; copper jewelry, Mrs. D. J. Turner; carved jade, Leslie Vance; obsidian and silver jewelry, Elizabeth Rengo; gem stones, including rough diamond, Katy Trapnell; outstanding thumbnails, Irene Hill; miniatures, Katherine Price; micromounts, Agnes Holst and Don

Price: chalcedony roses with quartz crystals, unusual, Marguerite and Herman Mark and Katy Trapnell; scepter crystals and unusual pyrites, Harry and Irene Hill. Harry also had a case of graduated orthoclase feldspar crystals. Orthoclase not pretty? Well you should see the arrangement of this case.

Most curious specimen: limonite pseudomorph after calcite with secondary calcite and adamite, displayed by Bill Reed.

From Outer Space: In addition to their fine exhibit of meteorites and stardust jewelry, the H. N. Niningers now have a stardust Christmas card and a meteorite crater study kit. These represent the beauties of the outer realm instead of the dangerous and cruel.

Exhibits this year were supervised by Glenn Pare in the absence of Arthur L. Flagg, who was convalescing from an injury. This is the first time that Mr. Flagg has ever been absent from his post as superintendent of State Fair Mineral Department. Mr. and Mrs. Harry Hill were assistants; and members of the societies donated spare time.

Ida Smith, Cor. Sec., MSOA
2238 East McDowell,
Phoenix, Arizona

THE MICRO-MOUNTER

Conducted by Neal Yedlin—129 Englewood Drive, New Haven, Conn.

We must compliment the Baltimore Mineral Society for its terrific job in executing and setting up a superb m/m convention. From 10 in the morning to 'way after 10 at night there wasn't a moment's inactivity. From the time Mr. Paul E. Desautels greeted the assembled group of m/m collectors, until "lights out" figuratively sounded in the laboratory workshop of the Maryland State Teachers' College, there were talks, demonstrations, workshops, swapping, bragging and all other elements that go into the making of a full and worthwhile day. Time flew by. There were no watchers. Everyone was a participant. We wish to express our appreciation for the privilege of being included. There must be more next year.

And while we are on the subject let us discuss the m/m competition and its judging. There were some 14 entries, each submitting from four to 12 mounts. Names were not shown to the judges. A technique similar to that discussed by us in the last issue of ROCKS AND MINERALS was put into use. Judge A examined all mounts and awarded each a numerical value based on selection of material and perfection—40 units. Judge B—the same but judged for rareness or unique quality—30 units. Judge C—technique in handling-mounting, labeling, etc.—15 units. Judge D—overall appearance and general excellence—15 units.

So that a specimen could conceivably receive 100 units for perfection from four separate judges. Totalling the unit score for all mounts of a contestant, and dividing by the number of mounts submitted by each gave an index or net score. Highest was the winner.

'Scopes and lights were supplied the judges. These were identical instruments. A fair and quite perfect decision was reached.

Noteworthy were the fine specimens submitted, especially from California and from junior micro-mounters (aged 14 to 17). And while Leonard Morgan of New Jersey was adjudged winner, H. W. Scott of Glendale, Calif., was just a shade behind, with Oke and others right on their heels. And the specimens! Morgan had a goethite from Paterson, N.J., and a beraunite from Hellertown, Pa., that were remarkable. Scott, with outstanding mounts, must have broken down thousands of hand specimens finally to obtain the degree of perfection demonstrated. Smith of Baltimore, with such things as ordonezite and cubic franklinite, startled the judges. And how about Paul Seel, of Philadelphia, who showed nine mounts – each a different form and color of diamond.

All in all, this was a terrific show.

We've had some very satisfactory dealings with the Murray-Baumgartner Instrument Co. of 5 W. Chase St., Baltimore. Ellsworth Geiwitz showed us around. He heads the microscope department and is most courteous and helpful. The firm specializes in medical and surgical equipment and carries a full line of microscopes and accessories. On occasion fine used equipment is turned in and available when a new purchase is made. If you're in the neighborhood, and in the market for a good 'scope (and who isn't?), it will pay you to drop in.

While we're on this subject let's talk about a new one making the rounds. We've noted these in New York at Macy's (about $24.95) and in New Haven at Radio Shack, 230 Crown St. ($19.95), Japanese make. 30 X. Adjustable eyepieces. Stereo-binocular. Rack and pinion for focusing. This is not a toy, but a useful little instrument with serviceable optics. Certainly better than a penscope. Better than a monocular 'scope for eliminating squint and for getting third dimension. For beginning m/m mineralogy, or while you're laying away for the $350 job, but best of all for lugging into the field and observing "in situ." When you go in to buy take a m/m along with you. Check two or three of the instruments. Some may be better than others. We are indebted to Leonard Morgan, who many months ago called to our attention the availability of these 'scopes. Others have mentioned them since.

Try this for blackening corks, balsa wood or paper. A "Magic Marker" kit. A loaded handy container with a fibre glass wick makes the fluid instantly available. Dries on contact to a fine black. No smudge, smear or accidental spilling. Waterproof. Costs less than a dollar, postpaid, and lasts for ages. Available from Arthur Goodwin Co. (he's a member of the m/m clan), 2524 Brookfield Ave., Baltimore, Md. (Note: Don't use it to blacken plastic boxes. The solvent works on the plastic and the wick gums up. Use flat black enamel. Any make.)

R. P. Cargille, 117 Liberty St., N.Y.C., now has black plastic boxes for m/ms. Standard size. 15/16ths square and ¾ deep. $4.60 per hundred. Cheaper in greater quantities. Available also with cardboard carrier box holding 12 plastics. Write for sizes and prices of his complete line.

Passed a TV shop last night and saw a revolving stand for table model set. Old-timers had a revolving m/m table at which four or six devotees sat. The table top turned, and the 'scope passed from one to another with no shifting about and everybody was lazy and happy.

So how about a piece of plywood set on a revolving TV table? Same effortless ease. Same effects. Now the "newtimers," too, can be lazy and happy.

Mineralogical Society of Arizona

Sue and Everett Berry of East Lynn, Mass., were special guests at the Nov. 15, 1957, meeting of the Mineralogical Society of Arizona, Phoenix, Ariz. Added to the program were their kodachromes and descriptions of their summer trip through Scotland and Wales. The travelogue covered many beautiful and historic spots. The Berrys are members of MSOA. Their visit each November is a special event for the society.

Ida Smith, Cor. Secy., MSOA
2238 East McDowell
Phoenix, Arizona

Frank Duncan Fund

(*See p.* 39)

Just as R&M was going to press, more contributions arrived for the Frank Duncan Fund.

Total previously received	$173.10
Bronx mineral collector, Bronx, N.Y.	5.00
2 Rockhounds from Menominee, Mich.	5.00
Anonymous (Pondosa, Calif.)	2.00
Total to date	$185.10

As mentioned on page 39 of this issue, Mr. Duncan prefers to receive the money as a loan, instead of an outright gift, and so the above sum ($185.10) has been sent him as a loan.

Prof. Walter F. Hunt receives Roebling Medal

ANN ARBOR—Retired University of Michigan Professor of Petrology Walter F. Hunt received the Roebling Medal for distinguished scientific achievement Tuesday (Nov. 5) at the annual meeting of the Mineralogical Society of America (MSA) in Atlantic City, N. J.

Professor Emeritus Hunt, who received three degrees from the U-M (BA 1904, MA 1905 and PhD 1915) is highly distinguished in the fields of petrology, mineralogy and crystallography.

In addition to many research projects, professional papers and textbooks he has published, he is noted for his unusually long association with the AMERICAN MINERALOGIST, journal of the MSA, of which he was editor for 35 years.

From the journal's modest origins, when Professor Hunt took over as editor in 1922, it rose in importance until today the AMERICAN MINERALOGIST is the world's leading professional publication of its kind.

Articles submitted from all over the world were read and prepared for publication by Professor Hunt before his retirement as editor in 1956, in addition to his full-time teaching duties and administrative position as chairman of the U-M Department of Mineralogy from 1933 to his retirement from the faculty in 1952. He was born Sept. 6, 1882 in Cincinnati, O.

The Roebling Medal, a gold medallion bearing the profile of Washington A. Roebling, is the highest honor bestowed on its members by the MSA, which is meeting in Atlantic City in conjunction with the Geological Society of America.

The medal was established as a memorial to Washington A. Roebling, who after the death of his father, designer of the Brooklyn Bridge, supervised its construction to completion. Roebling owned one of the best private collection in existence today, now housed in the National Museum, Washington, D.C. He became vice-president of the MSA and at his death left a gift under which the medals were established. Professor Hunt is the 16th recipient and the second from the U-M.

Professor Walter F. Hunt

Professor Emeritus Edward H. Kraus, long-time friend and colleague of Professor Hunt and former dean of the U-M College of Literature, and the Arts, won the Roebling Medal in 1945.

Of the MSA members present for the organizational meeting in December, 1919, only four survive and are still active in the group. All are active or emeritus members of the U-M faculty. They are, in addition to Hunt and Kraus, Chester B. Slawson, professor of mineralogy and member of the MSA council, and Lewis S. Ramsdell, present editor of the American Mineralogist and chairman of the Department of Mineralogy.

Professor Hunt is a member of the Rocks and Minerals Association.

WITH OUR ADVERTISERS

Conducted by James N. Bourne
c/o Rocks and Minerals. Box 29
Peekskill, N. Y.

Advertisers are cordially invited to submit News Items to this Department

The following item was received from Geo. A. Bruce, Pres., International Import Co., 604 Peachtree St., N.E., Atlanta 8, Ga. Read it carefully and note their display ad in this issue of R&M for a wonderful buy. Also take a look at their classified ads for some additionally fine purchases.

"Years ago I read a highly interesting article in the July, 1947 ROCKS & MINERALS entitled 'Agni Mani–Magic Gem of the Orient'. Since then we have made many efforts to acquire some of these and recently have been very successful. What we have obtained is probably the largest collection anywhere, but still very limited to offer on the collector market; however, we do wish to make these available to your readers and are enclosing a display ad giving the necessary information. As you know, these are exceedingly rare and are the Oriental variety of tektite. Since they are of extra-terrestrial origin, many legends grew up about them in the Far East.

"Did you know that in some circles they are valued at five times the price of diamonds? Needless to say, ours are a small fraction of that price,–being from $1.00 to $3.00 per ct. Since you have back copies of that issue available, please send us ten of them. To explain more about these to our clientele, we have devoted two pages of our new 1958 catalogue to these. They are most interesting in their natural shape, but can be cut with ease into beautiful cabochons and faceted stones. We send our catalogue free of charge to all those requesting it."

Note: As the above mentioned "Agni Mani" are quite rare and that there are but limited quantity, it would be wise to place your order immediately to obtain a much desired gem that you'll forever treasure.

L. W. (Lee) Hoge, 400 Fortson Dr., Athens, Ga., advertising in the display section of R&M these days would like the following item brought to the attention of our readers:

"I would like to call attention to the green tourmaline preforms that I am offering. This isn't the usual color. It's a deep, deep green, and being deep it has a limit in depth of the finished gem. I have preformed this material so that nobody will cut a stone too dark, or too light to get the proper color depth. The color and depth of this material is startling. The preforms are cut from flawless material.

"I am sorry to say that my stock of urananite xl specimens is small, but on the theory that 'Where there's some, there surely must be more,' I hope to have an additional supply in February.

"Since all the star beryl rough is badly flawed, I want to point out that the large select pieces I am featuring in my current ad in this issue are indeed rare. This material handles easily and anybody who can cut a cab, can cut star beryl. I want to call attention to my approval plan and whenever possible, I'll send a number of pieces of each item, and allow my customers a good supply to select from."

From Ken Stewart's Gem Shop, 37 South West Temple, Salt Lake City, Utah; we are in receipt of a circular containing 15 UTAH LOCATIONS, how and where to get to them, plus the minerals to be found at each of the loca-

tions. This informative circular may be had by visitation to Ken Stewart's Gem Shop while in Salt Lake City or by sending a stamped, self addressed envelope for your copy as well as a sample of oolite sand from the shores of the Great Salt Lake in Utah.

A line or two from Ken Stewart in regards to the UTAH LOCATIONS reads as follows:

"We wish you good hunting and that you will get what you can use. Please don't be like some before you and try to haul the whole state away. There will be other nice folks like you who will visit these areas and we hope all enjoy our wonderful hunting."

H. W. Eckert, Owner of Eckert's Mineral Research, 110 East Main St., Florence, Colo., stopped by recently to visit us and related that he is on his way to a 5 month collecting tour all over Europe from Sweden down to Sicily.

"Eckert's have a large stock of foreign minerals on hand and this supply will be further supplemented shortly. Send us your want list and we will do our best to provide you with good quality specimens at reasonable prices. Also send for our Geological Supply Catalogue which gives standard prices for all materials. Price, $1.00, this will be credited against purchase over $10.00. A must for every mineral collector."

Note: We wished Mr. Eckert "Bon Voyage" and as he is taking his new car with him to Europe, we know his trip will be all the more interesting as his transportation problem will be taken care of nicely.

From Ernest W. Beissinger, 417 Clark Building, Pittsburgh 22, Pa., we have an interesting bit of information that he desires passed on to our readers.

"Our wholesale faceting service has become a tremendously important feature in our business. We receive letters from customers every single day praising our workmanship and expressing their satisfaction with the low cost for such high grade faceting. This service fills the need for so many lapidaries who don't have enough time to facet all their materials. The Beissingers also have engaged one of the best stone engravers in Europe. He works at their shop in Idar-Oberstein. Mr. Beissinger is equipped to handle all size faceting orders. Work is done promptly and delivery usually takes 4 to 5 weeks. All work is guaranteed."

An item received from Bert C. Cole of the Boise Gem Shop of Boise, Idaho reads as follows

"The well known Boise Gem Shop has now secured a much more suitable location with considerably more favorable surroundings. They will re-open very soon at 4057 Highway #20, Boise, Idaho, bigger and better than ever.

"The business is no longer a partnership but is owned and operated exclusively by Bert and Pat Cole, the original owners of the Boise Gem Shop prior to the partnership.

"They welcome their old and new customers and friends at their new location, anytime!"

Note: We wish Bert Cole and his wife Pat our sincere good wishes as to their success in their new location.

From Scott J. Williams, 2346 S. Scottsdale Road, Scottsdale, Ariz., we have received his new Mineral Catalog and an item re: to same which I'm sure will prove interesting to our readers.

"For the past 3 years we have been issuing monthly Mineral Collector's Lists which are the predecessors to this Mineral Catalog. These lists featured new minerals, new finds, and new localities of primarily 'one of a kind' specimens particularly suited to the more advanced mineral collector.

"We have had many requests for a catalog of minerals suitable for those just beginning their collections, for prospectors, and for research and teaching purposes. Hence, this completely new publication has been prepared.

"We are pleased to bring this catalog to you and to offer you a convenient and easy method of selection. If you have

special needs, do not hesitate to write us."

Note: We congratulate Mr. Williams on this fine new Mineral Catalog which should prove to be very popular among those who wish to acquire some fine specimens at reasonable prices.

Alfred E. Hawley of the Lakewood Scientific Specialty Co., 5938 E. Turnergrove Drive, Lakewood 11, Calif., now advertising in R&M with this issue in our display section, is featuring "The Lakewood Kit" that allows you to test for uranium, gold, silver, tungsten, mercury, thorium and many other metals as well as the identification of nearly all minerals and valuable ores. Price of the kit is $36.00 plus shipping charges from Los Angeles, Calif. Since all acids are supplied in this kit, Postal Regulations require that the kit be shipped by express only.

"The Lakewood Kit contains the equipment for testing hardness, streak, magnetism, and other physical properties of minerals. Many minerals can be identified by means of these properties alone, especially when they occur in crystals.

"Blowpipe equipment includes charcoal and plaster blocks, blowpipe, fluxes, forceps, alcohol lamp, and special reagents for blowpipe work. The famous sodium fluoride bead test for uranium may be performed with kit and a Mineralite Ultraviolet light.

"All the usual chemical reactions such as fusion, digestion with acids, neutralization, precipitations, filtration, etc. can be performed. These operations are described thoroughly in the directions so that you don't have to be a chemist to use the Lakewood Kit."

Note: Above "Kit" should prove popular with Mineralogists, collectors, schools and all those in need of such a kit. Get the satisfaction of identifying your own specimens with a purchase of one.

We received a copy of "ARIZONA GEM FIELDS" by Alton Duke, Box 1402, Yuma, Ariz., advertising in R&M this issue in our display section. We recommend this book very highly as it is very informative as to facts, the exact localities where gems may be found etc. Valuable information as to trips in the desert and desert driving are included, plus a great deal of other information that will be a great help to rockhounds. Price of a copy of "Arizona Gem Fields" is but $2.50 and worth every cent of it

Alton Duke says "I am a rockhound and this book was written for two reasons: first as a service to the collectors and second, for fun."

Note: Send for your copy today, you'll read it from cover to cover—J. Bourne.

The following item of interest was received from Byron and Lottie Shipley of Shipley's Mineral House, (Gem Village) Bayfield, Colo., and reads as follows:

"We have subscribed to R&M for many years and have always enjoyed it, and look forward to each new issue.

"Shipley's Mineral House has been growing with Gem Village for eleven years until now it has a frontage of 100 feet containing a complete stock of Lapidary Equipment, cutting material, findings, jewelry, typical as well as rare specmens and custom Platinum, gold and silversmithing.

"Year by year our trade with eastern people has grown. Hundreds of eastern rockhounds visit our store each year, so we have decided to start advertising in R&M. We have many tons of good material from everywhere and most of it collected when collecting was good. We have decided that R&M is the surest way of finding homes for some of it."

Note: Contact Shipley's Mineral House and enhance your collection with a purchase of some fine specimens. We have had some fine comments from readers relative to their acquiring very good material from the Shipley's. They'll be pleased in hearing from you.

The following item was received from Gerald J. Navratil, who advertises regularly in R&M:

"NAVRATIL is located approximately five miles east of Middleburg on the Huntersland Road. On route 145 at the

(*Continued on page* 60)

With Our Advertisers

(Continued from page 52)

Middleburg Diner (near Cemetery), tu off onto Huntersland Road. Travel fi miles. Follow the Strout (realty) sig Our sign is located just past the Mi Buzon farm (Strout agent)."

Note: We wish Mr. Navratil the be of success as to his new venture. Dr in and see Gerald when up that wa He'll be pleased to see you.

ATTENTION COLLECTORS!

When sending in orders to any of our advertisers, be sure your name and address appears on your orders and written PLAINLY.